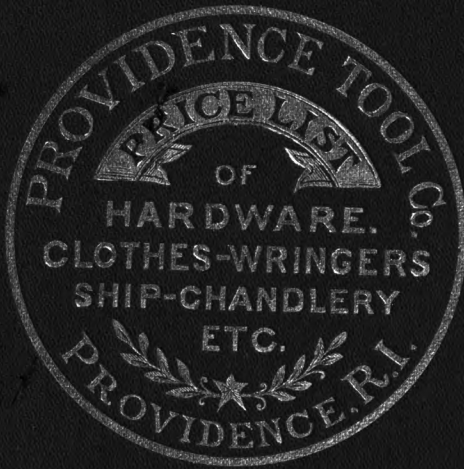


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43



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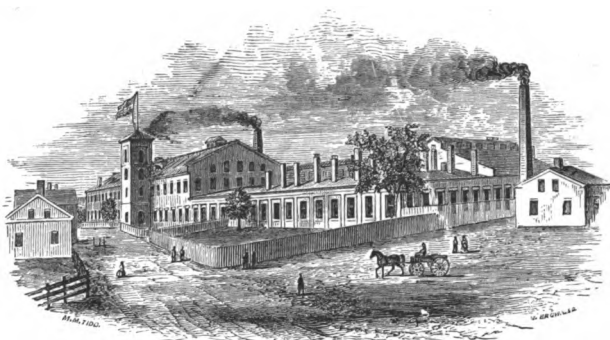
PRICE LIST

OF THE

PROVIDENCE TOOL COMPANY.

JOHN B. ANTHONY, Treasurer,

PROVIDENCE, R. I.

Manufactories at Providence, R. I.

ESTABLISHED 1845.

OFFICES AND WAREROOMS,

H. B. NEWHALL, *Agent*, 11 WARREN ST., NEW YORK.J. H. WORK, *Agent*, 44 BROAD ST., BOSTON.S. H. & E. Y. MOORE, *Agents*, 68 LAKE ST., CHICAGO.

1873.

Sample
T

43

. A1848565

By special arrangement with Messrs. LEWIS, OLIVER, & PHILLIPS, WILLIAM H. HASKELL & CO., RHODE ISLAND NUT CO., READING BOLT AND NUT WORKS, and WORCESTER MACHINE SCREW CO., the PROVIDENCE TOOL CO. offer the Manufactures of either Concerns at the lowest market rates, and will make deliveries from the Factories, or from New York, Boston, or Providence.

TERMS.



Cash, with Exchange on Boston or New York.

Goods delivered at Wharf or Depot in Boston and New York.

No Charge for Cartage or Package in Providence.

For

.....

.....



HEAVY HARDWARE
AND
RAILROAD SUPPLIES.

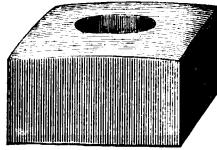
MARINE HARDWARE
AND
SHIP CHANDLERY.

THE "PROVIDENCE" CLOTHES WRINGER.

THE "HOUSEHOLD" CLOTHES WRINGER, Etc., Etc.

Square Nuts.

COLD



PUNCHED.

MANUFACTURERS' STANDARD LIST

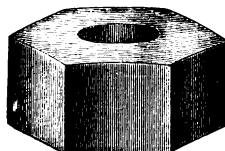
ADOPTED BY "THE ASSOCIATION OF BOLT AND NUT MANUFACTURERS OF THE UNITED STATES," AT THEIR MEETING IN NEW YORK, JUNE 12, 1872,
AND REVISED DECEMBER 11, 1872.

Width.	Thickness.	Hole.	Size of Bolt.	Price per lb.
$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{1}{2}$	50
$\frac{3}{4}$	$\frac{3}{4}$	$\frac{5}{8}$	$\frac{3}{8}$	30
$\frac{7}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{4}$	23
$\frac{5}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{5}{16}$	20
$\frac{3}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	17
$\frac{7}{8}$	$\frac{7}{8}$	$\frac{1}{2}$	$\frac{7}{8}$	14
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{7}{8}$	$\frac{1}{2}$	12
$\frac{1}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{9}{16}$	12
$\frac{1}{8}$	$\frac{5}{8}$	$\frac{9}{16}$	$\frac{5}{8}$	11½
$\frac{1}{4}$	$\frac{5}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	11½
$\frac{3}{8}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	11½
$\frac{1}{2}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	11
$\frac{5}{8}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	11
$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	11
$\frac{7}{8}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	11
$\frac{1}{2}$	1	$\frac{7}{8}$	1	11
2	1	$\frac{7}{8}$	1	11
$\frac{1}{2}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	12
$\frac{3}{4}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	12
$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	12
$\frac{3}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	12
$\frac{1}{2}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	12½
$\frac{3}{4}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	12½
$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	14
$\frac{3}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	14
$\frac{1}{2}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	14
$\frac{3}{4}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	14
4	2	$\frac{1}{2}$	2	14

Sizes not enumerated on above list will be charged extra, at discretion of the manufacturer.

Hexagon Nuts.

COLD



PUNCHED.

MANUFACTURERS' STANDARD LIST,

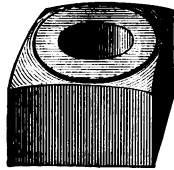
ADOPTED BY "THE ASSOCIATION OF BOLT AND NUT MANUFACTURERS OF THE UNITED STATES," AT THEIR MEETING IN NEW YORK, JUNE 12, 1872,
AND REVISED DECEMBER 11, 1872.

Width.	Thickness.	Hole.	Size of Bolt.	Price per lb.
$\frac{1}{2}$	$\frac{1}{4}$	$\frac{7}{32}$	$\frac{1}{4}$	35
$\frac{3}{8}$	$\frac{5}{16}$	$\frac{9}{32}$	$\frac{5}{16}$	30
$\frac{1}{2}$	$\frac{3}{8}$	$\frac{11}{32}$	$\frac{3}{8}$	24
$\frac{3}{4}$	$\frac{1}{2}$	$\frac{7}{16}$	$\frac{1}{2}$	20
1	$\frac{1}{2}$	$\frac{7}{16}$	$\frac{1}{2}$	18
$1\frac{1}{8}$	$\frac{5}{8}$	$\frac{9}{16}$	$\frac{5}{8}$	16½
$1\frac{1}{4}$	$\frac{3}{4}$	$\frac{9}{16}$	$\frac{3}{4}$	16½
$1\frac{3}{8}$	$\frac{3}{4}$	$\frac{11}{16}$	$\frac{3}{4}$	16½
$1\frac{1}{2}$	$\frac{7}{8}$	$\frac{11}{16}$	$\frac{3}{4}$	16
$1\frac{5}{8}$	$\frac{7}{8}$	$\frac{11}{16}$	$\frac{7}{8}$	16
$1\frac{3}{4}$	1	$\frac{11}{16}$	$\frac{7}{8}$	16
$1\frac{7}{8}$	1	$\frac{11}{16}$	1	16
$2\frac{1}{4}$	$1\frac{1}{4}$	$\frac{11}{16}$	$1\frac{1}{8}$	16
$2\frac{1}{2}$	$1\frac{3}{8}$	$1\frac{1}{16}$	$1\frac{1}{4}$	17
$2\frac{3}{4}$	$1\frac{1}{2}$	$1\frac{3}{16}$	$1\frac{3}{8}$	17
3	$1\frac{5}{8}$	$1\frac{1}{2}$	$1\frac{1}{2}$	17
$3\frac{1}{4}$	$1\frac{3}{4}$	$1\frac{7}{16}$	$1\frac{1}{2}$	17½
$3\frac{1}{2}$	$1\frac{7}{8}$	$1\frac{9}{16}$	$1\frac{3}{4}$	17½
$3\frac{3}{4}$	2	$1\frac{11}{16}$	$1\frac{7}{8}$	19
$4\frac{1}{2}$	2	$1\frac{11}{16}$	2	19

Sizes not enumerated on above list will be charged extra, at discretion of the manufacturer.

Square Nuts.

HOT



PRESSED.

MANUFACTURERS' STANDARD LIST,

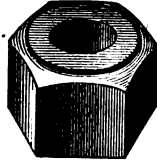
ADOPTED BY "THE ASSOCIATION OF BOLT AND NUT MANUFACTURERS OF THE UNITED STATES," AT THEIR MEETING IN NEW YORK, JUNE 12, 1872,
AND REVISED DECEMBER 11, 1872.

Width.	Thickness.	Hole.	Size of Bolt.	Price per lb.
$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{1}{8}$	50
$\frac{3}{4}$	$\frac{3}{4}$	$\frac{5}{8}$	$\frac{3}{8}$	30
1	1	$\frac{7}{8}$	$\frac{1}{2}$	23
$1\frac{1}{4}$	$1\frac{1}{4}$	1	$\frac{5}{8}$	20
$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{4}$	$\frac{3}{4}$	17
$1\frac{3}{4}$	$1\frac{3}{4}$	$1\frac{1}{2}$	$\frac{7}{8}$	14
2	2	$1\frac{3}{4}$	1	12
$2\frac{1}{4}$	$2\frac{1}{4}$	2	$1\frac{1}{8}$	11 $\frac{1}{2}$
$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{4}$	$1\frac{1}{4}$	
$2\frac{3}{4}$	$2\frac{3}{4}$	$2\frac{1}{2}$	$1\frac{3}{8}$	
3	3	$2\frac{3}{4}$	$1\frac{1}{2}$	11
$3\frac{1}{4}$	$3\frac{1}{4}$	3	$1\frac{5}{8}$	
$3\frac{1}{2}$	$3\frac{1}{2}$	$3\frac{1}{4}$	$1\frac{3}{4}$	
$3\frac{3}{4}$	$3\frac{3}{4}$	$3\frac{1}{2}$	$1\frac{7}{8}$	
4	4	$3\frac{3}{4}$	2	14

Sizes not enumerated on above list will be charged extra, at discretion of the manufacturer.

Hexagon Nuts.

HOT



PRESSED.

MANUFACTURERS' STANDARD LIST,

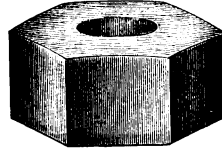
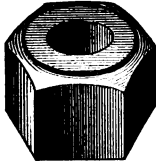
ADOPTED BY "THE ASSOCIATION OF BOLT AND NUT MANUFACTURERS OF THE UNITED STATES," AT THEIR MEETING IN NEW YORK, DECEMBER 11, 1872.

Width.	Thickness.	Hole.	Size of Bolt.	Price per lb.
$\frac{1}{2}$	$\frac{1}{4}$	$\frac{7}{32}$	$\frac{1}{4}$	35
$\frac{5}{8}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{5}{16}$	30
$\frac{3}{4}$	$\frac{3}{8}$	$\frac{11}{32}$	$\frac{3}{8}$	24
$\frac{7}{8}$	$\frac{1}{2}$	$\frac{7}{16}$	$\frac{1}{2}$	20
1	$\frac{1}{2}$	$\frac{7}{16}$	$\frac{1}{2}$	18
$1\frac{1}{8}$	$\frac{5}{8}$	$\frac{9}{16}$	$\frac{5}{8}$	
$1\frac{1}{4}$	$\frac{5}{8}$	$\frac{9}{16}$	$\frac{5}{8}$	$16\frac{1}{2}$
$1\frac{1}{2}$	$\frac{3}{4}$	$\frac{11}{16}$	$\frac{3}{4}$	
$1\frac{3}{4}$	$\frac{3}{4}$	$\frac{11}{16}$	$\frac{3}{4}$	16
$1\frac{7}{8}$	$\frac{7}{8}$	$\frac{13}{16}$	$\frac{7}{8}$	
$1\frac{5}{8}$	1	$\frac{13}{16}$	$\frac{7}{8}$	
$1\frac{5}{8}$	1	$\frac{13}{16}$	$\frac{7}{8}$	
$1\frac{3}{4}$	1	$\frac{13}{16}$	1	
$1\frac{3}{4}$	$1\frac{1}{8}$	$\frac{7}{8}$	1	
2	$1\frac{1}{4}$	$\frac{15}{16}$	$1\frac{1}{8}$	17
$2\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{8}$	$1\frac{1}{4}$	
$2\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{3}{8}$	$1\frac{3}{8}$	
$2\frac{3}{4}$	$1\frac{5}{8}$	$1\frac{5}{8}$	$1\frac{1}{2}$	
3	$1\frac{3}{4}$	$1\frac{7}{8}$	$1\frac{3}{4}$	$17\frac{1}{2}$
$3\frac{1}{4}$	$1\frac{7}{8}$	$1\frac{9}{8}$	$1\frac{3}{4}$	
$3\frac{1}{2}$	2	$1\frac{11}{8}$	$1\frac{7}{8}$	19
$3\frac{3}{4}$	2	$1\frac{13}{8}$	2	

Sizes not enumerated on above list will be charged extra, at discretion of the manufacturer.

ADDITIONAL LIST OF Light or "P" Sizes.

HOT
PRESSED



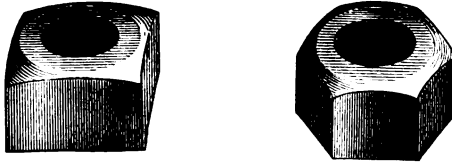
OR COLD
PUNCHED.

Short Diameter.	Thickness.	Hole.	Size of Bolt.	Price per Pound.	
				Square.	Hexagon.
$\frac{5}{8}$	$\frac{3}{8}$	$\frac{21}{64}$	$\frac{3}{8}$	20	30
$\frac{3}{4}$	$\frac{7}{8}$	$\frac{25}{64}$	$\frac{7}{8}$	17	24
$\frac{7}{8}$	$\frac{1}{2}$	$\frac{1}{8}$	$\frac{1}{2}$	14	20
1	$\frac{9}{8}$	$\frac{1}{2}$	$\frac{9}{8}$	12	18
$1\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{16}$	$\frac{1}{8}$		
$1\frac{1}{4}$	$\frac{3}{4}$	$\frac{21}{32}$	$\frac{3}{4}$	$11\frac{1}{2}$	$16\frac{1}{2}$
$1\frac{3}{8}$	$\frac{7}{8}$	$\frac{49}{64}$	$\frac{7}{8}$		
$1\frac{1}{2}$	1	$\frac{1}{8}$	1	11	16
2	$1\frac{1}{8}$	1	$1\frac{1}{8}$		
$2\frac{1}{4}$	$1\frac{1}{4}$	$1\frac{3}{32}$	$1\frac{1}{4}$	12	17
$2\frac{1}{2}$	$1\frac{3}{4}$	$1\frac{1}{32}$	$1\frac{1}{2}$		
$2\frac{3}{4}$	$1\frac{1}{2}$	$1\frac{5}{16}$	$1\frac{1}{2}$	$12\frac{1}{2}$	$17\frac{1}{2}$

U. S. GOVERNMENT STANDARD SIZES.

Short Diameter.	Thickness.	Hole.	Size of Bolt.	Price per Pound.	
				Square.	Hexagon.
$\frac{1}{2}$	$\frac{1}{4}$	.189 = $\frac{3}{16}$	$\frac{1}{4}$	25	35
$\frac{9}{32}$	$\frac{5}{16}$	.24 = $\frac{1}{4}$	$\frac{5}{16}$		
$\frac{11}{16}$	$\frac{3}{8}$	.294 = $\frac{9}{32}$	$\frac{3}{8}$	22	32
$\frac{3}{4}$	$\frac{7}{8}$	.344 = $\frac{11}{16}$	$\frac{7}{8}$	18	25
$\frac{7}{8}$	$\frac{1}{2}$	.4 = $\frac{1}{2}$	$\frac{1}{2}$	15	21
$\frac{15}{16}$	$\frac{9}{16}$	.454 = $\frac{9}{16}$	$\frac{9}{16}$	13	19
$1\frac{1}{8}$	$\frac{5}{8}$	.507 = $\frac{1}{2}$	$\frac{5}{8}$		
$1\frac{1}{4}$	$\frac{3}{4}$	.62 = $\frac{5}{8}$	$\frac{3}{4}$	$12\frac{1}{2}$	$17\frac{1}{2}$
$1\frac{7}{8}$	$\frac{7}{8}$	.731 = $\frac{23}{32}$	$\frac{7}{8}$		
$1\frac{3}{4}$	1	.837 = $\frac{9}{16}$	1	12	17
$1\frac{1}{2}$	$1\frac{1}{8}$	.94 = $\frac{1}{8}$	$1\frac{1}{8}$		
2	$1\frac{1}{4}$	1.065 = $1\frac{1}{16}$	$1\frac{1}{4}$		
$2\frac{1}{8}$	$1\frac{3}{8}$	1.16 = $1\frac{1}{32}$	$1\frac{3}{8}$	13	18
$2\frac{3}{8}$	$1\frac{1}{2}$	1.284 = $1\frac{9}{32}$	$1\frac{1}{2}$		
$2\frac{1}{2}$	$1\frac{3}{4}$	1.389 = $1\frac{1}{8}$	$1\frac{3}{4}$	14	19
$2\frac{3}{4}$	$1\frac{3}{4}$	1.491 = $1\frac{1}{4}$	$1\frac{3}{4}$		
$2\frac{1}{2}$	$1\frac{7}{8}$	1.616 = $1\frac{3}{8}$	$1\frac{7}{8}$	15	20
$3\frac{1}{8}$	2	1.712 = $1\frac{1}{2}$	2		
$3\frac{1}{2}$	$2\frac{1}{4}$	1.962 = $1\frac{5}{8}$	$2\frac{1}{4}$	20	25

Machinery Nuts.



CHAMFERED AND TRIMMED.

WE wish to call your notice to our Extra Trimmed Nuts for Machinery.

They are especially adapted for all kinds of machine work where strength and neat finish are required, and are made so smooth as to require but very little labor for the most highly finished work.

The holes are true, and always exactly in the centre, thus obviating trouble which is often experienced where milling is necessary.

We also make them with drilled holes, thus enabling the machinist to produce a thread perfectly smooth and full, and with the greatest ease in tapping.

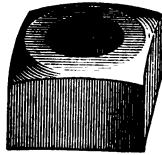
We usually keep in stock, Nuts of the Light or "P" sizes (see page preceding), and other standard sizes, and can make to order any sizes which may be required.

We will gladly furnish a sample lot to show the quality.

For Sizes and Prices, see next two pages.

Machinery Nuts.

COLD



PUNCHED.

CHAMFERED AND TRIMMED.

SQUARE.

MANUFACTURERS' STANDARD LIST,

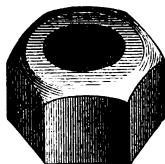
ADOPTED BY "THE ASSOCIATION OF BOLT AND NUT MANUFACTURERS OF THE UNITED STATES," AT THEIR MEETING IN NEW YORK, DECEMBER 11, 1872.

Width.	Thickness.	Hole.	Size of Bolt.	Price per lb.
$\frac{1}{2}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{1}{8}$	50
$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	30
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{7}{8}$	$\frac{1}{2}$	23
$\frac{5}{8}$	$\frac{5}{8}$	$\frac{9}{8}$	$\frac{5}{8}$	20
$\frac{3}{4}$	$\frac{3}{4}$	$\frac{11}{8}$	$\frac{3}{4}$	17
$\frac{7}{8}$	$\frac{7}{8}$	$\frac{13}{8}$	$\frac{7}{8}$	14
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{7}{8}$	$\frac{1}{2}$	
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{7}{8}$	$\frac{1}{2}$	
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{7}{8}$	$\frac{1}{2}$	12
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{7}{8}$	$\frac{1}{2}$	
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{7}{8}$	$\frac{1}{2}$	
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{7}{8}$	$\frac{1}{2}$	11½
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{7}{8}$	$\frac{1}{2}$	
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{7}{8}$	$\frac{1}{2}$	
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{7}{8}$	$\frac{1}{2}$	11
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{7}{8}$	$\frac{1}{2}$	
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{7}{8}$	$\frac{1}{2}$	
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{7}{8}$	$\frac{1}{2}$	
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{7}{8}$	$\frac{1}{2}$	
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{7}{8}$	$\frac{1}{2}$	
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{7}{8}$	$\frac{1}{2}$	
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{7}{8}$	$\frac{1}{2}$	
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{7}{8}$	$\frac{1}{2}$	
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{7}{8}$	$\frac{1}{2}$	

Sizes not enumerated on above list will be charged extra, at discretion of the manufacturer.

Machinery Nuts.

COLD



PUNCHED.

CHAMFERED AND TRIMMED.

HEXAGON.

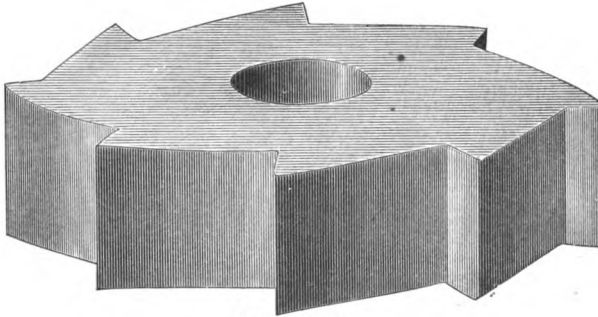
MANUFACTURERS' STANDARD LIST,

ADOPTED BY "THE ASSOCIATION OF BOLT AND NUT MANUFACTURERS OF THE UNITED STATES," AT THEIR MEETING IN NEW YORK, DECEMBER 11, 1872.

Width.	Thickness.	Hole.	Size of Bolt.	Price per lb.
$\frac{1}{2}$	$\frac{1}{4}$	$\frac{7}{32}$	$\frac{1}{4}$	35
$\frac{5}{8}$	$\frac{5}{16}$	$\frac{9}{32}$	$\frac{5}{16}$	30
$\frac{3}{4}$	$\frac{3}{8}$	$\frac{11}{32}$	$\frac{3}{8}$	24
$\frac{7}{8}$	$\frac{1}{2}$	$\frac{7}{16}$	$\frac{1}{2}$	20
1	$\frac{1}{2}$	$\frac{7}{16}$	$\frac{1}{2}$	18
$1\frac{1}{8}$	$\frac{5}{8}$	$\frac{9}{16}$	$\frac{5}{8}$	
$1\frac{1}{4}$	$\frac{3}{4}$	$\frac{11}{16}$	$\frac{3}{4}$	16 $\frac{1}{2}$
$1\frac{3}{8}$	$\frac{3}{4}$	$\frac{13}{16}$	$\frac{3}{4}$	
$1\frac{1}{2}$	$\frac{7}{8}$	$\frac{13}{16}$	$\frac{7}{8}$	16
$1\frac{5}{8}$	$\frac{7}{8}$	$\frac{15}{16}$	$\frac{7}{8}$	
$1\frac{3}{4}$	1	$\frac{15}{16}$	1	
$1\frac{7}{8}$	1	$\frac{15}{16}$	1	
$1\frac{1}{2}$	$1\frac{1}{8}$	$\frac{15}{16}$	$1\frac{1}{8}$	
2	$1\frac{1}{4}$	$\frac{15}{16}$	$1\frac{1}{8}$	

Sizes not enumerated on above list will be charged extra, at discretion of the manufacturer.

Ratchet Nuts.

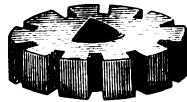


FULL SIZE.

Long Diameter.	Thickness.	Hole	Price per lb.
$3\frac{1}{8}$	$\frac{5}{8}$	$\frac{5}{8}$	26
$3\frac{1}{2}$	$\frac{3}{4}$	$1\frac{1}{8}$	26
$3\frac{3}{8}$	$\frac{7}{8}$	$\frac{3}{4}$	26

Blanks for Door-Spring Nuts.

FULL

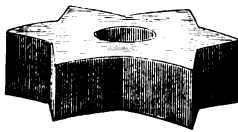


SIZE.

Diameter.	Thickness.	Hole.	Price.
$\frac{3}{4}$	$\frac{1}{4}$	$\frac{3}{16} \Delta$	30

Star Nuts.

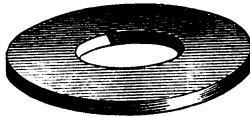
FULL



SIZE.

Outside Diam.	Thickness.	Hole.	Price.
1	$\frac{3}{8}$	$\frac{5}{16}$	30

Washers.



MANUFACTURERS' STANDARD LIST,

ADOPTED BY "THE ASSOCIATION OF BOLT AND NUT MANUFACTURERS OF THE UNITED STATES," AT THEIR MEETING IN NEW YORK, DECEMBER 11, 1872.

Diameter.	Size of Hole.	Thickness Wire Gauge.	Size of Bolt.	Price per lb.
$\frac{1}{2}$	$\frac{1}{4}$	No. 18	$\frac{3}{16}$	34
$\frac{5}{8}$	$\frac{5}{16}$	" 16	$\frac{1}{4}$	32
$\frac{3}{4}$	$\frac{5}{16}$	" 16	$\frac{1}{4}$	28
$\frac{7}{8}$	$\frac{3}{8}$	" 16	$\frac{5}{16}$	24
1	$\frac{7}{16}$	" 14	$\frac{3}{8}$	20
$1\frac{1}{4}$	$\frac{1}{2}$	" 14	$\frac{7}{16}$	16
$1\frac{3}{8}$	$\frac{9}{16}$	" 12	$\frac{1}{2}$	
$1\frac{1}{2}$	$\frac{5}{8}$	" 12	$\frac{9}{16}$	
$1\frac{3}{4}$	$\frac{11}{16}$	" 10	$\frac{5}{8}$	15
2	$\frac{13}{16}$	" 10	$\frac{3}{4}$	
$2\frac{1}{4}$	$\frac{15}{16}$	" 9	$\frac{7}{8}$	14
$2\frac{1}{2}$	$1\frac{1}{16}$	" 9	1	
$2\frac{3}{4}$	$1\frac{1}{4}$	" 9	$1\frac{1}{8}$	
3	$1\frac{3}{8}$	" 9	$1\frac{1}{2}$	
$3\frac{1}{2}$	$1\frac{1}{2}$	" 9	$1\frac{3}{8}$	

Washers ordered of thinner gauge, or sizes not enumerated above, will be charged extra, at discretion of the manufacturer.

TABLE

Showing the Average Number of Nuts in a Keg, 150 lbs.
each, SQUARE and HEXAGON, of Standard
Sizes, as adopted by "The Association of
Bolt and Nut Manufacturers of the
United States."

Width.	Thickness.	Hole.	No. of Square.	No. of Hexagon.
$1\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	45,000	
$1\frac{3}{8}$	$\frac{3}{4}$	$\frac{3}{4}$	22,500	
$1\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	10,000	10,500
$1\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{4}$	5,106	6,666
$1\frac{1}{8}$	$\frac{1}{8}$	$\frac{3}{4}$	2,727	4,528
$1\frac{1}{8}$	$\frac{1}{8}$	$\frac{3}{4}$	1,904	2,057
$1\frac{1}{8}$	$\frac{1}{8}$	$\frac{3}{4}$	1,695	1,890
1	$\frac{1}{2}$	$\frac{7}{8}$	1,218	1,538
$1\frac{1}{8}$	$\frac{1}{2}$	$\frac{7}{8}$	1,016	1,245
$1\frac{1}{8}$	$\frac{1}{2}$	$\frac{7}{8}$	885	957
$1\frac{1}{8}$	$\frac{1}{2}$	$\frac{7}{8}$	638	740
$1\frac{1}{8}$	$\frac{1}{2}$	$\frac{7}{8}$	450	555
$1\frac{1}{8}$	$\frac{1}{2}$	$\frac{7}{8}$	368	430
$1\frac{1}{8}$	$\frac{1}{2}$	$\frac{7}{8}$	260	270
$1\frac{1}{8}$	$\frac{1}{2}$	$\frac{7}{8}$	243	252
$1\frac{1}{8}$	1	$\frac{7}{8}$	249	257
2	1	$\frac{7}{8}$	163	204
2	$1\frac{1}{8}$	$\frac{5}{8}$	143	168
$2\frac{1}{4}$	$1\frac{1}{8}$	$\frac{5}{8}$	109	150
$2\frac{1}{4}$	$1\frac{1}{8}$	$1\frac{1}{8}$	85	120
$2\frac{1}{4}$	$1\frac{1}{8}$	$1\frac{1}{8}$	84	93
$2\frac{1}{4}$	$1\frac{1}{8}$	$1\frac{1}{8}$	55	60
3	$1\frac{1}{2}$	$1\frac{1}{8}$	51	56
$3\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{1}{8}$	39	44
$3\frac{1}{2}$	$1\frac{3}{4}$	$1\frac{1}{8}$	32	35
$3\frac{3}{4}$	$1\frac{3}{4}$	$1\frac{1}{8}$	28	30
4	2	$1\frac{3}{8}$	20	22

TABLE

Showing the Average Number of WASHERS in a Keg
of 150 lbs., of each Standard Size, as adopted by
"The Association of Bolt and Nut Manufacturers of the United States."

Diameter.	Size of Hole.	Thickness Wire Gauge.	Size of Bolt.	No. in 150 lbs.
$\frac{1}{2}$	$\frac{1}{4}$	No. 18	$\frac{3}{8}$	80,000
$\frac{3}{8}$	$\frac{5}{16}$	" 16	$\frac{1}{4}$	34,285
$\frac{1}{2}$	$\frac{5}{16}$	" 16	$\frac{1}{4}$	22,000
$\frac{3}{4}$	$\frac{3}{8}$	" 16	$\frac{5}{16}$	18,500
1	$\frac{7}{16}$	" 14	$\frac{3}{8}$	10,550
$\frac{1}{4}$	$\frac{1}{2}$	" 14	$\frac{7}{8}$	7,500
$\frac{1}{2}$	$\frac{9}{16}$	" 12	$\frac{1}{2}$	4,500
$\frac{3}{4}$	$\frac{5}{8}$	" 12	$\frac{9}{16}$	3,850
$\frac{1}{2}$	$\frac{1}{8}$	" 10	$\frac{5}{8}$	2,500
2	$\frac{1}{2}$	" 10	$\frac{3}{4}$	1,600
$\frac{1}{4}$	$\frac{1}{8}$	" 9	$\frac{7}{8}$	1,300
$\frac{1}{2}$	$\frac{1}{8}$	" 9	1	950
$\frac{3}{4}$	$\frac{1}{4}$	" 9	$\frac{1}{2}$	700
3	$\frac{1}{8}$	" 9	$\frac{1}{4}$	550
$\frac{3}{2}$	$\frac{1}{2}$	" 9	$\frac{1}{8}$	450

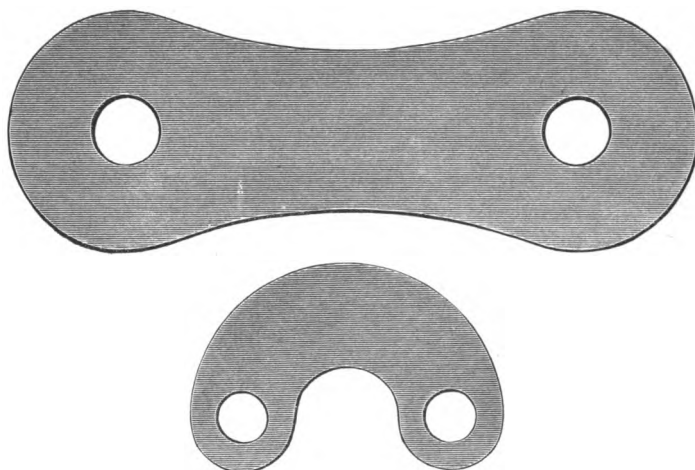
Au Sable or Norway Iron Burrs.

Diameter.	Holes.	Price Per Gross.
1	$\frac{1}{2}$	60 cts.
$\frac{1}{2}$	$\frac{3}{8}$	54
$\frac{3}{8}$	$\frac{7}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{4}$, $\frac{5}{8}$, $\frac{1}{8}$	40
$\frac{1}{4}$	$\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{8}$, $\frac{3}{8}$, $\frac{1}{4}$, #4	35
$\frac{3}{4}$	$\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{4}$, #4, #5, #5 $\frac{1}{2}$	31
$\frac{1}{2}$	$\frac{3}{4}$, $\frac{1}{4}$, #4, #5, #5 $\frac{1}{2}$, #6, #6 $\frac{1}{2}$	29
$\frac{1}{4}$	$\frac{1}{2}$, #4, #5, #5 $\frac{1}{2}$, #6, #6 $\frac{1}{2}$, #7, #7 $\frac{1}{2}$, #8, #9	25
$\frac{3}{8}$	#6, #6 $\frac{1}{2}$, #7, #7 $\frac{1}{2}$, #8, #9, #10	24
$\frac{1}{8}$	#7 $\frac{1}{2}$, #8, #9, #10	18

The Sizes from 1 inch to $\frac{1}{2}$ inch are No. 18, Wire Gauge. $\frac{1}{2}$ inch and smaller No. 19, Wire Gauge.

Sizes or Thickness not enumerated on the above List, will be charged extra.

Chain Links.



Outside length . . . $\frac{3}{4}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$, $1\frac{3}{4}$, $1\frac{7}{8}$ in.

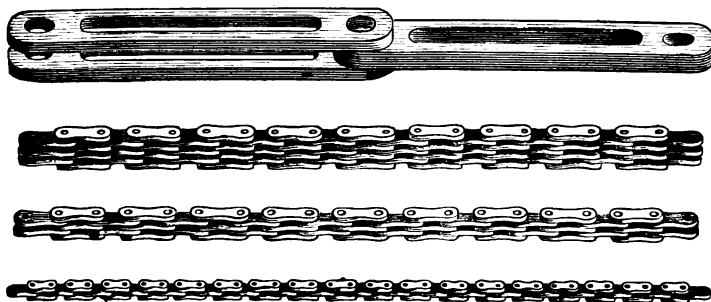
Price per thousand, \$7.50, 9.40, 11.20, 12.50, 13.60, 15.00, 22.50, 30.00.

All larger sizes 20 cents per pound.

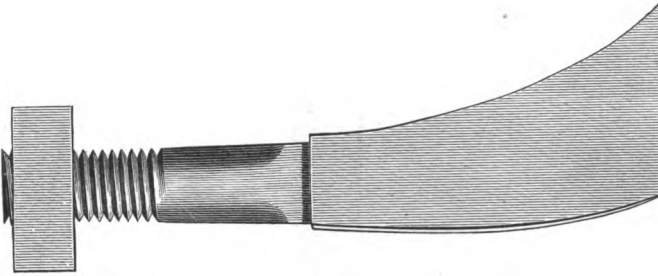
We manufacture Endless Chains or Links for them of a large variety of shapes and sizes.

We make between one and two hundred different styles, varying in length from one quarter inch to twelve inches long. They are suitable for almost every variety of work, such as models for Small Machines, Feed Motion for Lathes, Mules, Ice Hoisting, Sugar Mills, etc. In fact, we can furnish it for every kind of work desired.

We will mail to any party our Diagram Book, showing outside shape and size of over 100 links manufactured by us.



Threshing-Machine Teeth.

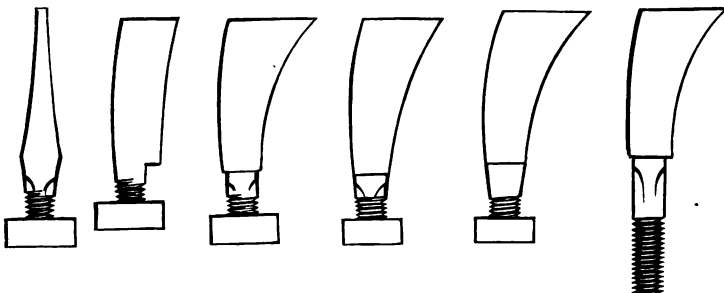


HAVING for several years been extensively engaged in the manufacture of Teeth (or Spikes) for some of the largest Threshing-Machine builders in the United States and Canada, we take pleasure in being able to confidently recommend our Teeth as being superior in quality and finish to any others yet made.

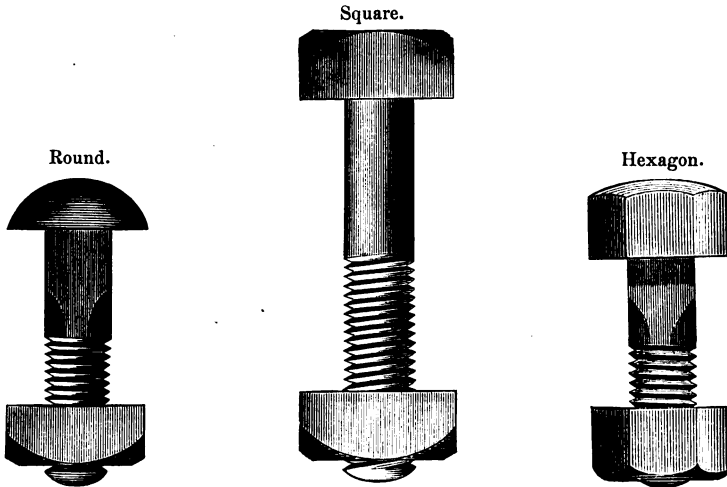
The iron we use is prepared from the very best of charcoal blooms, and made of such a degree of hardness as long experience shows us to be especially adapted for Thresher Teeth.

The teeth are so tough as to prevent breaking, even if bent flat upon the cylinder while in motion.

In cutting the threads and fitting the nuts, we follow with care whatever directions may be given by parties ordering, so that the nuts will fit teeth made in previous years. We now have tools for a large number of different styles, and are ready to manufacture any pattern which may be desired. We will gladly quote prices and furnish samples on application.



Machine Bolts.



MANUFACTURERS' STANDARD LISTS,

ADOPTED BY "THE ASSOCIATION OF BOLT AND NUT MANUFACTURERS OF THE UNITED STATES," AT THEIR MEETING IN NEW YORK, JUNE 12, 1872.

PRICE PER HUNDRED.

LENGTH.	DIAMETER.							
	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{3}{4}$
$1\frac{1}{2}$ inch	2 90	3 00	3 25	3 70	4 60	5 30	6 50	10 20
$1\frac{3}{4}$ inch	2 95	3 05	3 35	3 80	4 75	5 45	6 70	10 45
2 inches	3 00	3 10	3 45	3 90	4 90	5 60	6 90	10 70
$2\frac{1}{4}$ inches	3 05	3 15	3 55	4 00	5 05	5 75	7 10	10 95
$2\frac{1}{2}$ inches	3 10	3 20	3 65	4 10	5 20	5 90	7 30	11 20
$2\frac{3}{4}$ inches	3 15	3 25	3 75	4 20	5 35	6 05	7 50	11 45
3 inches	3 20	3 30	3 85	4 30	5 50	6 20	7 70	11 70
$3\frac{1}{4}$ inches	3 25	3 35	3 95	4 40	5 65	6 35	7 90	11 95
$3\frac{1}{2}$ inches	3 30	3 40	4 05	4 50	5 80	6 50	8 10	12 20
4 inches	3 40	3 50	4 25	4 70	6 10	6 80	8 50	12 70

PRICE PER POUND.

LENGTH.	DIAMETER.					
	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{3}{4}$
$4\frac{1}{2}$ to 6 inches	20	18	15	14	13	12
$6\frac{1}{2}$ to 12 inches	18	16	13	13	12	11
Over 12 inches	16	14	12	12	11	10

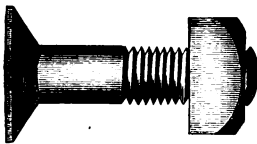
$\frac{7}{16}$ and 1 inch, from 2 to 4 inches long, 16 cents.

$\frac{7}{16}$ and 1 inch, $4\frac{1}{2}$ inch and longer, same as $\frac{1}{2}$ inch.

Bolts with Hexagon Heads or Hexagon Nuts, 10 per cent. extra.

If both Hexagon Heads and Hexagon Nuts, 20 per cent. extra.

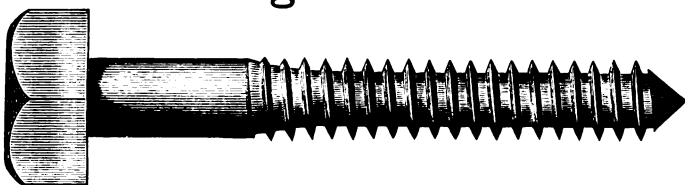
Plow Bolts.



PRICE PER HUNDRED.

Diameter $\frac{3}{8}$			Diameter $\frac{7}{16}$			Diameter $\frac{1}{2}$		
$1\frac{1}{4}$ inch	.	2 50	$1\frac{1}{4}$ inch	.	3 00	$1\frac{1}{4}$ inch	.	3 80
$1\frac{1}{2}$ inch	.	2 55	$1\frac{1}{2}$ inch	.	3 10	$1\frac{1}{2}$ inch	.	3 95
$1\frac{3}{4}$ inch	.	2 60	$1\frac{3}{4}$ inch	.	3 20	$1\frac{3}{4}$ inch	.	4 10
2 inches	.	2 65	2 inches	.	3 30	2 inches	.	4 25
$2\frac{1}{4}$ inches	.	2 70	$2\frac{1}{4}$ inches	.	3 40	$2\frac{1}{4}$ inches	.	4 40
$2\frac{1}{2}$ inches	.	2 80	$2\frac{1}{2}$ inches	.	3 50	$2\frac{1}{2}$ inches	.	4 55
$2\frac{3}{4}$ inches	.	2 90	$2\frac{3}{4}$ inches	.	3 60	$2\frac{3}{4}$ inches	.	4 70
3 inches	.	3 00	3 inches	.	3 70	3 inches	.	4 85
$3\frac{1}{4}$ inches	.	3 10	$3\frac{1}{4}$ inches	.	3 80	$3\frac{1}{4}$ inches	.	5 00
$3\frac{1}{2}$ inches	.	3 20	$3\frac{1}{2}$ inches	.	3 90	$3\frac{1}{2}$ inches	.	5 15
$3\frac{3}{4}$ inches	.	3 30	$3\frac{3}{4}$ inches	.	4 00	$3\frac{3}{4}$ inches	.	5 30
4 inches	.	3 40	4 inches	.	4 10	4 inches	.	5 45

Lag Screws.



MANUFACTURERS' STANDARD LIST,

ADOPTED JUNE 12, 1872.

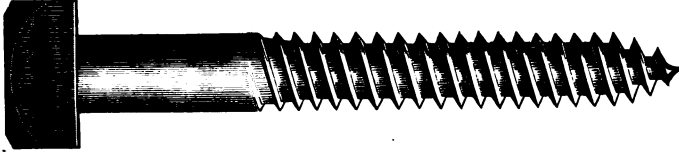
PRICE PER HUNDRED.

DIAMETER.	LENGTH.						
	$1\frac{1}{2}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$	3 in.
$\frac{1}{4}$. . .	2 60	2 65	2 70	2 75	2 80	2 85	2 90
$\frac{5}{16}$. . .	2 70	2 75	2 80	2 85	2 90	2 95	3 00

PRICE PER POUND.

$\frac{3}{8}$ by 3 inches and longer	. . . . .	20 cts.
$\frac{7}{16}$ by 3 inches and longer	. . . . .	18
$\frac{1}{2}$ by 3 inches and longer	. . . . .	15
$\frac{9}{16}$ by 3 inches and longer	. . . . .	14
$\frac{5}{8}$ by 3 inches and longer	. . . . .	13
$\frac{3}{4}$ and larger, by 3 inches and longer	. . . . .	12
Shorter than 3 inches, 2 cents per lb., advance.		

Gimlet-Point Coach Screws.



PRICE PER HUNDRED.

LENGTH.	DIAMETER.					
	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$
1 $\frac{1}{8}$ inch	2 00	2 00	—	—	—	—
1 $\frac{3}{8}$ inch	2 10	2 25	—	—	—	—
2 inches	2 25	2 50	2 75	3 25	4 00	5 25
2 $\frac{1}{2}$ inches	2 50	2 75	3 00	3 50	4 25	5 50
3 inches	2 75	3 00	3 25	3 75	4 50	5 75
3 $\frac{1}{2}$ inches	3 25	3 50	3 75	4 00	5 00	6 00
4 inches	3 50	3 75	4 00	4 50	5 50	6 50
4 $\frac{1}{2}$ inches	—	4 00	4 25	5 00	6 00	7 00
5 inches	—	4 25	4 50	5 50	6 50	7 50

COACH SCREWS IN KEGS OF 150 POUNDS.

Diameter.	Length.	Per Pound.
$\frac{5}{16}$ inch.	3 inches and longer.	34
$\frac{3}{8}$ inch.	3 inches and longer.	24
$\frac{7}{16}$ inch.	3 inches and longer.	20
$\frac{1}{2}$ inch.	3 inches and longer.	17
$\frac{9}{16}$ inch.	3 inches and longer.	16
$\frac{5}{8}$ inch.	3 inches and longer.	15
$\frac{3}{4}$ and larger.	3 inches and longer.	14

Shorter than 3 inches, 2 cents per pound advance.

WM. H. HASKELL & CO.'S List of Threads.

Right Hand Threads.				Left Hand Threads.			
Size.	No. Threads.	Size.	No. Threads.	Size.	No. Threads.	Size.	No. Threads.
$\frac{3}{8}$	20	$\frac{7}{8}$	9, 10	$\frac{1}{4}$	18	$\frac{1}{4}$	18
$\frac{1}{2}$	18, 16, 20	1	8, 10	$\frac{5}{16}$	16	$\frac{5}{16}$	16
$\frac{5}{8}$	16, 18, 20	$\frac{11}{16}$	8	$\frac{3}{8}$	14	$\frac{3}{8}$	14
$\frac{3}{4}$	14, 16	$\frac{13}{16}$	7	$\frac{7}{8}$	14	$\frac{7}{8}$	14
$\frac{7}{8}$	14, 16, 12	$\frac{15}{16}$	7	$\frac{15}{16}$	12	$\frac{15}{16}$	12
$\frac{15}{16}$	12, 14, 10	1	7	$\frac{17}{16}$	10	$\frac{17}{16}$	10
$\frac{17}{16}$	12	$\frac{19}{16}$	5 $\frac{1}{2}$	$\frac{19}{16}$	10	$\frac{19}{16}$	10
$\frac{19}{16}$	10, 11, 12	$\frac{21}{16}$	5	$\frac{21}{16}$	9	$\frac{21}{16}$	9
$\frac{21}{16}$	10, 9, 12	$\frac{23}{16}$	4 $\frac{1}{2}$	$\frac{23}{16}$	8	$\frac{23}{16}$	8
$\frac{23}{16}$		2		1		1	

The first column of the number of threads to the inch are our Standard Threads.

Hanger Bolts.



Diameter.	Length.	Per Pound.
$\frac{5}{8}$	5 to 7 in.	14
$\frac{3}{4}$	6 to 8 in.	14
$\frac{7}{8}$	7 to 9 in.	14
1	8 to 12 in.	14

Any size made to order. Hexagon Heads
10% extra.

Bridge and Roof Bolts.

1 to 2 inches diameter, over 8 feet long.

1 to 2 inches diameter, from 4 to 8 feet
long.

1 to 2 inches diameter, from $1\frac{1}{2}$ to 4 feet
long.

$\frac{5}{8}$, $\frac{3}{4}$, and $\frac{7}{8}$ inch diameter, over 4 feet
long.

$\frac{5}{8}$, $\frac{3}{4}$, and $\frac{7}{8}$ inches diameter, from $1\frac{1}{2}$ to
4 feet long.

Net prices will be given upon applica-
tion.



Bolt Ends.



MANUFACTURERS' STANDARD LIST,

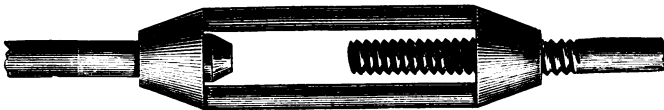
ADOPTED JUNE 12, 1872.

PRICE PER POUND.

Size.	Length.	Per Pound
$\frac{1}{2}$ inch	8	12
$\frac{5}{8}$ inch	8	12
$\frac{3}{4}$ inch	9	11
$\frac{7}{8}$ inch	10	9
1 inch	11	9
1 $\frac{1}{8}$ inch	12	9
1 $\frac{1}{4}$ inch	13	9
1 $\frac{3}{8}$ inch	14	9
1 $\frac{1}{2}$ inch	15	9
1 $\frac{3}{4}$ inch	16	9
1 $\frac{7}{8}$ inch	17	12
2 inches	18	12

Special Lengths, or larger and smaller Sizes, made to order, and charged extra at discretion of manufacturers.

Turn Buckles.



MANUFACTURERS' STANDARD LIST,

ADOPTED JUNE 12, 1872.

Size.	Price.	Size.	Price.
$\frac{3}{8}$ inch . . .	1.00	1 inch . . .	17
$\frac{1}{2}$ inch . . .	1.25	1 $\frac{1}{8}$ inch . . .	17
$\frac{5}{8}$ inch . . .	1.50	1 $\frac{1}{4}$ inch . . .	16
1 inch . . .	.20	1 $\frac{3}{8}$ inch . . .	16
1 $\frac{1}{2}$ inch . . .	.18		

Larger Sizes made to order.

Set Screws and Tap Bolts.



MANUFACTURERS' STANDARD LIST,

ADOPTED JUNE 12, 1872.

PRICE PER HUNDRED.

LENGTH.	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{3}{4}$
1 $\frac{1}{2}$ inch . .	2 60	2 70	2 85	3 20	3 85	4 40	5 50	8 50
1 $\frac{3}{4}$ inch . .	2 65	2 75	2 95	3 30	4 00	4 55	5 70	8 75
2 inches . .	2 70	2 80	3 05	3 40	4 15	4 70	5 90	9 00
2 $\frac{1}{4}$ inches . .	2 75	2 85	3 15	3 50	4 30	4 85	6 10	9 25
2 $\frac{1}{2}$ inches . .	2 80	2 90	3 25	3 60	4 45	5 00	6 30	9 50
2 $\frac{3}{4}$ inches . .	2 85	2 95	3 35	3 70	4 60	5 15	6 50	9 75
3 inches . .	2 90	3 00	3 45	3 80	4 75	5 30	6 70	10 00

Set Screws or Tap Bolts with Hexagon Heads, 10 per cent. extra.

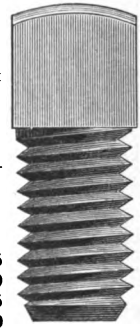
Square Head Set Screws.

PRICE PER HUNDRED.



Oval Point Set Screw.

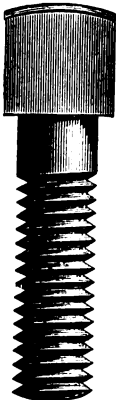
No. Thread to Inch Diameter Screw	20 1-4	18 5-16	16 3-8	14 7-16	13 1-2	12 9-16	11 5-8	10 3-4
Length under H'd.								
$\frac{3}{4}$ inch .	3 00	3 30	3 75	4 35	5 10	-	-	-
1 inch .	3 20	3 55	4 00	4 65	5 40	6 40	-	-
$1\frac{1}{4}$ inch .	3 45	3 75	4 20	4 95	5 70	6 75	7 90	-
$1\frac{1}{2}$ inch .	3 70	4 00	4 45	5 25	6 00	7 15	8 25	11 25
$1\frac{3}{4}$ inch .	3 90	4 20	4 65	5 55	6 30	7 50	8 65	12 00
2 inches	4 15	4 45	4 90	5 85	6 60	7 90	9 00	12 75
$2\frac{1}{4}$ inches	-	4 65	5 10	6 15	7 00	8 25	9 40	13 50
$2\frac{1}{2}$ inches	-	-	5 35	6 45	7 20	8 65	9 75	14 25
$2\frac{3}{4}$ inches	-	-	-	6 75	7 50	9 00	10 15	15 00
3 inches	-	-	-	-	7 80	9 40	10	15 75



Cup Point Set Screw.

Square Head Cap Screws.

PRICE PER HUNDRED.



Cap Screw.

Diameter Head .	3-8	7-16	1-2	9-16	5-8	11-16	3-4	7-8
Length Head .	5-16	3-8	7-16	9-16	5-8	11-16	3-4	7-8
No. Thread to Inch	20	18	16	14	13	12	11	10
Diameter Screw .	1-4	5-16	3-8	7-16	1-2	9-16	5-8	3-4
Length under H'd.								
$\frac{3}{4}$ inch .	3 30	3 75	4 35	5 10	6 00	-	-	-
1 inch .	3 55	4 00	4 65	5 40	6 40	7 50	-	-
$1\frac{1}{4}$ inch .	3 75	4 20	4 95	5 70	6 75	7 90	10 50	-
$1\frac{1}{2}$ inch .	4 00	4 45	5 25	6 00	7 15	8 25	11 25	14 25
$1\frac{3}{4}$ inch .	4 20	4 65	5 55	6 30	7 50	8 65	12 00	15 00
2 inches	4 45	4 90	5 85	6 60	7 90	9 00	12 75	15 75
$2\frac{1}{4}$ inches	-	5 10	6 15	7 00	8 25	9 40	13 50	16 50
$2\frac{1}{2}$ inches	-	-	6 45	7 20	8 65	9 75	14 25	17 25
$2\frac{3}{4}$ inches	-	-	-	7 50	9 00	10 15	15 00	18 00
3 inches	-	-	-	-	9 40	10 50	15 75	18 75

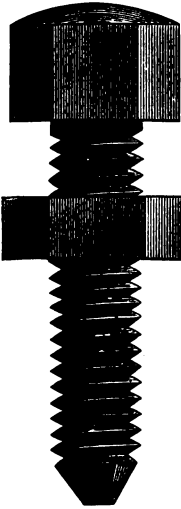


Cap Screw.

In ordering Set Screws please state if you wish them with Oval or Cup Points. Also, if Case Hardened or not.

N. B. We wish to call the attention of Machine Manufacturers to our Case Hardened Screws, by new process, which we consider as good as Steel, being made from superior quality of Iron and thoroughly hardened.

Case Hardening, ten per cent. extra.

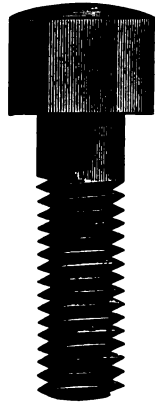


Hanger Screw

Hexagon Head Cap Screws.

PRICE PER HUNDRED.

No. Thread to Inch. Diam. Screw.	18 5-16	16 3-8	14 7-16	13 1-2	12 9-16	11 5-8	10 3-4
Length und. Hd.							
$\frac{3}{4}$ inch .	4 85	5 65	6 60	7 95	-	-	-
1 inch .	5 25	6 00	7 05	8 40	10 50	-	-
$1\frac{1}{4}$ inch .	5 65	6 35	7 50	8 85	11 25	14 25	-
$1\frac{1}{2}$ inch .	6 00	6 75	7 95	9 30	12 00	15 00	18 00
$1\frac{3}{4}$ inch .	6 35	7 15	8 40	9 75	12 75	15 75	18 75
2 inches	6 75	7 50	8 85	10 20	13 50	16 50	19 50
$2\frac{1}{4}$ inches	7 15	7 90	9 30	10 65	14 25	17 25	20 25
$2\frac{1}{2}$ inches	-	8 25	9 75	11 10	15 00	18 00	21 00
$2\frac{3}{4}$ inches	-	-	10 25	11 55	15 75	18 75	21 75
3 inches	-	-	-	12 00	16 50	19 50	22 50



Hexagon Head Cap Screw.

Round Head Set or Cap Screws.

PRICE PER HUNDRED.

Diameter Head.	3-16	9-32	11-32	15-32	19-32	23-32	13-16	7-8	15-16	13-16
Length Head.	1-8	5-32	3-16	1-4	5-16	7-16	1-2	9-16	5-8	3-4
No. Thr'd to In.	40	30	20	18	16	14	13	12	11	10
Diam. Screw.	1-8	3-16	1-4	5-16	3-8	7-16	1-2	9-16	5-8	3-4
Length und. Hd.										
$\frac{3}{4}$ inch .	3 00	3 40	3 75	4 50	5 25	6 00	7 50	-	-	-
1 inch .	3 40	3 75	4 15	4 90	5 65	6 40	7 95	9 90	-	-
$1\frac{1}{4}$ inch .	3 75	4 15	4 50	5 25	6 00	6 75	8 40	10 35	13 50	-
$1\frac{1}{2}$ inch .	4 15	4 50	4 90	5 65	6 40	7 15	8 85	10 80	14 25	18 00
$1\frac{3}{4}$ inch .	-	4 90	5 25	6 00	6 75	7 50	9 30	11 25	15 00	18 75
2 inches	-	-	5 65	6 40	7 15	7 90	9 75	11 70	15 75	19 50
$2\frac{1}{4}$ inches	-	-	-	6 75	7 50	8 25	10 20	12 15	16 50	20 25
$2\frac{1}{2}$ inches	-	-	-	-	7 90	8 65	10 65	12 60	17 25	21 00
$2\frac{3}{4}$ inches	-	-	-	-	-	9 00	11 10	13 05	18 00	21 75
3 inches	-	-	-	-	-	-	11 55	13 50	18 75	22 50



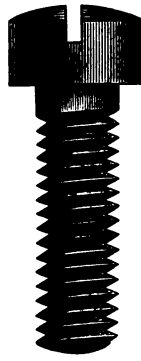
Round Countersunk Head Screw.

Finished Heads from 50 cents to \$2.00 per hundred extra.

All Screws included in these Lists are turned or milled from the bar, it being the only practicable way of making Screws of this description.

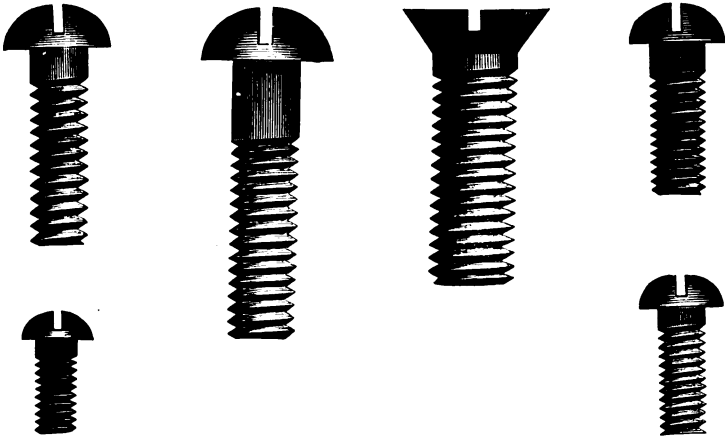
Every description of Milled Machine Screws made to order at short notice.

Prices for sizes not on this list furnished on application.



Round Head Cap Screw

Machine Screws.



ROUND AND COUNTERSUNK.

PRICE PER GROSS.

Threads per Inch . . .	32	30 or 32	24	24	20	16 or 18		16	
Numbers		8	10	12	14	16	18	20	24
Length of Screw.									
$\frac{3}{8}$ inch	1 35	1 50	1 65	—	—	—	—	—	—
$\frac{1}{2}$ inch	1 35	1 50	1 65	1 80	2 25	2 70	—	—	—
$\frac{5}{8}$ inch	—	1 50	1 65	1 80	2 25	2 70	3 15	3 90	—
$\frac{3}{4}$ inch	—	1 50	1 65	1 95	2 40	2 85	3 45	4 20	—
$\frac{7}{8}$ inch	—	—	1 80	2 10	2 55	3 00	3 75	4 50	—
1 inch	—	—	1 95	2 25	2 70	3 30	4 05	4 80	6 00
$1\frac{1}{4}$ inch	—	—	—	2 40	2 85	3 60	4 35	5 10	6 60
$1\frac{1}{2}$ inch	—	—	—	—	3 00	3 90	4 65	5 40	7 20

All Machine Screws cut with a Solid Die and warranted uniform in size.

Prices for sizes not on this List furnished on application.

Machine Taps.

Diameter.	Length Tap.	Length Thread.	No. of Thread.	Price.
$\frac{1}{4}$	6	2	20	1 00
$\frac{5}{16}$	$7\frac{1}{2}$	$2\frac{1}{4}$	18	1 30
$\frac{3}{8}$	9	$2\frac{3}{4}$	16	1 65
$\frac{7}{8}$	$10\frac{1}{2}$	$2\frac{3}{4}$	14	1 95
$\frac{1}{2}$	$11\frac{1}{2}$	3	13	2 30
$\frac{9}{16}$	12	$3\frac{1}{4}$	12	2 60
$\frac{5}{8}$	$12\frac{1}{2}$	$3\frac{3}{4}$	11	2 95
$\frac{3}{4}$	13	$3\frac{3}{4}$	10	3 25
$\frac{7}{8}$	$13\frac{1}{2}$	4	9	3 90
1	14	$4\frac{1}{4}$	8	4 55
$1\frac{1}{8}$	$14\frac{1}{2}$	$4\frac{1}{2}$	7	5 20
$1\frac{1}{4}$	15	5	7	6 50
$1\frac{3}{8}$	$15\frac{1}{2}$	$5\frac{1}{2}$	6	7 50
$1\frac{1}{2}$	16	6	6	9 75
$1\frac{3}{4}$	$16\frac{1}{2}$	$6\frac{1}{2}$	$5\frac{1}{2}$	11 70
$1\frac{7}{8}$	17	7	5	13 65
$1\frac{1}{2}$	$17\frac{1}{2}$	$7\frac{1}{2}$	5	15 60
2	18	8	$4\frac{1}{2}$	17 55

Hand Taps.



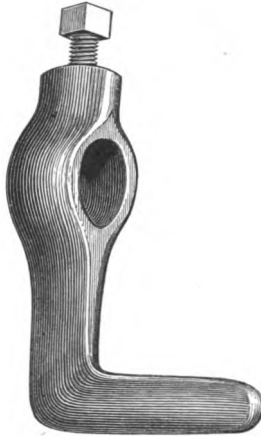
Diameter.	Length Tap.	Length Thread.	No. of Thread.	Price.
$\frac{1}{4}$	3	$5\frac{5}{8}$	20	65
$\frac{5}{16}$	$3\frac{1}{4}$	$5\frac{1}{2}$	18	80
$\frac{3}{8}$	$3\frac{3}{8}$	$5\frac{1}{8}$	16	95
$\frac{7}{8}$	$3\frac{3}{4}$	1	14	1 10
$\frac{1}{2}$	4	$1\frac{1}{8}$	13	1 30
$\frac{9}{16}$	$4\frac{1}{4}$	$1\frac{1}{4}$	12	1 55
$\frac{5}{8}$	$4\frac{1}{2}$	$1\frac{3}{8}$	11	1 85
$\frac{3}{4}$	$4\frac{3}{4}$	$1\frac{1}{2}$	10	2 35
$\frac{7}{8}$	5	$1\frac{5}{8}$	9	2 80
1	$5\frac{1}{4}$	$1\frac{3}{4}$	8	3 65
$1\frac{1}{8}$	$5\frac{3}{8}$	$1\frac{7}{8}$	7	4 40
$1\frac{1}{4}$	$5\frac{1}{2}$	2	7	5 20
$1\frac{3}{8}$	6	$2\frac{1}{8}$	6	6 25
$1\frac{1}{2}$	$6\frac{1}{4}$	$2\frac{1}{4}$	6	7 70
$1\frac{3}{4}$	$6\frac{1}{2}$	$2\frac{3}{8}$	$5\frac{1}{2}$	8 90
$1\frac{7}{8}$	7	$2\frac{3}{4}$	5	9 35
$1\frac{1}{2}$	$7\frac{1}{2}$	$2\frac{3}{4}$	5	10 40
2	8	3	$4\frac{1}{2}$	11 70

Taper Taps 20 per cent. extra. Our Hand and Machine Taps are made of best tool steel, and to fit U. S. Standard, unless otherwise ordered.

Lathe Dogs.

MALLEABLE

IRON.



PRICE PER DOZEN.

Size.	Price.	Size.	Price.	Size.	Price.
$\frac{3}{8}$	4 50	1	9 00	$2\frac{1}{4}$	15 20
$\frac{1}{2}$	5 00	$1\frac{1}{4}$	10 35	$2\frac{1}{2}$	16 00
$\frac{5}{8}$	5 75	$1\frac{1}{2}$	11 70	$2\frac{3}{4}$	16 80
$\frac{3}{4}$	6 50	$1\frac{3}{4}$	13 05	3	17 60
$\frac{7}{8}$	7 75	2	14 40		

Sizes above 3 inches furnished at proportionate prices.

Price of a Set of Eight Dogs from $\frac{3}{8}$ to 2 inches, \$6.25.

Finished Thumb Screws.



Beaded Heads. All sizes made to order. Prices given on application.

Carriage Bolts.



MADE FROM CHARCOAL IRON,

WITH

Forged Nuts and Oval Heads.

STANDARD PRICE LIST,

REVISED AND ADOPTED AT A MEETING OF MANUFACTURERS, JUNE 11, 1873.

PRICE PER HUNDRED.

LENGTH.	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$ & $\frac{5}{8}$	$\frac{3}{4}$
1 and $1\frac{1}{4}$ inch	2 40	—	—	—	—	—	—
$1\frac{1}{2}$ inch . .	2 40	3 00	—	—	—	—	—
$1\frac{3}{4}$ inch . .	2 45	3 10	—	—	—	—	—
2 inches . .	2 50	3 20	4 00	6 00	7 25	—	—
$2\frac{1}{4}$ inches . .	2 55	3 30	4 15	6 20	7 50	—	—
$2\frac{1}{2}$ inches . .	2 60	3 40	4 30	6 40	7 75	—	—
$2\frac{3}{4}$ inches . .	2 65	3 50	4 45	6 60	8 00	—	—
3 inches . .	2 70	3 60	4 60	6 80	8 25	15 00	17 20
$3\frac{1}{4}$ inches . .	2 75	3 70	4 75	7 00	8 50	15 40	17 90
$3\frac{1}{2}$ inches . .	2 80	3 80	4 90	7 20	8 75	15 80	18 60
$3\frac{3}{4}$ inches . .	2 85	3 90	5 05	7 40	9 00	16 20	19 60
4 inches . .	2 90	4 00	5 20	7 60	9 25	16 60	20 00
$4\frac{1}{4}$ inches . .	2 95	4 10	5 35	7 80	9 50	17 00	—
$4\frac{1}{2}$ inches . .	3 00	4 20	5 50	8 00	9 75	17 40	21 50
$4\frac{3}{4}$ inches . .	3 05	4 30	5 65	8 20	10 00	17 80	—
5 inches . .	3 10	4 40	5 80	8 40	10 25	18 20	22 25
$5\frac{1}{2}$ inches . .	3 20	4 60	6 10	8 80	10 75	19 00	22 75
6 inches . .	3 30	4 80	6 40	9 20	11 25	19 80	23 00
$6\frac{1}{2}$ inches . .	3 40	5 00	6 70	9 60	11 75	20 60	24 50
7 inches . .	3 50	5 20	7 00	10 00	12 25	21 40	26 00
$7\frac{1}{2}$ inches . .	—	5 40	7 30	10 40	12 75	22 20	27 50
8 inches . .	—	5 60	7 60	10 80	13 25	23 00	29 00
$8\frac{1}{2}$ inches . .	—	5 80	7 90	11 20	13 75	23 80	30 50
9 inches . .	—	6 00	8 20	11 60	14 25	24 60	32 00
$9\frac{1}{2}$ inches . .	—	6 20	8 50	12 00	14 75	25 40	33 50
10 inches . .	—	6 40	8 80	12 40	15 25	26 20	35 00
11 inches . .	—	—	9 40	13 20	16 25	27 80	36 50
12 inches . .	—	—	10 00	14 00	17 25	29 40	38 00
13 inches . .	—	—	—	14 80	18 25	31 00	41 00
14 inches . .	—	—	—	15 60	19 25	32 60	44 00
15 inches . .	—	—	—	—	20 25	34 20	47 00
16 inches . .	—	—	—	—	21 25	35 80	50 00

Tire Bolts.



**MADE FROM CHARCOAL IRON,
WITH
FORGED NUTS.**

THE MANUFACTURERS OF CARRIAGE AND TIRE BOLTS, HAVE ADOPTED THE
FOLLOWING REVISED LIST ON TIRE BOLTS, TO TAKE EFFECT ON
AND AFTER MARCH 1, 1872.

LENGTH.	DIAMETERS.			
	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$
1 $\frac{1}{4}$ inch, per 100 . . .	1 90	1 90	2 70	3 60
1 $\frac{1}{2}$ inch, per 100 . . .	1 90	1 90	2 70	3 60
1 $\frac{3}{4}$ inch, per 100 . . .	1 95	1 95	2 80	3 70
2 inches, per 100 . . .	2 00	2 00	2 90	3 70
2 $\frac{1}{4}$ inches, per 100 . . .	2 05	2 05	3 00	3 82
2 $\frac{1}{2}$ inches, per 100 . . .	2 10	2 10	3 10	3 95
2 $\frac{3}{4}$ inches, per 100 . . .	2 15	2 15	3 20	4 08
3 inches, per 100 . . .	2 20	2 20	3 30	4 20
3 $\frac{1}{4}$ inches, per 100 . . .	2 25	2 25	3 40	4 32
3 $\frac{1}{2}$ inches, per 100 . . .	2 30	2 30	3 50	4 45
4 inches, per 100 . . .	2 40	2 40	3 70	4 70

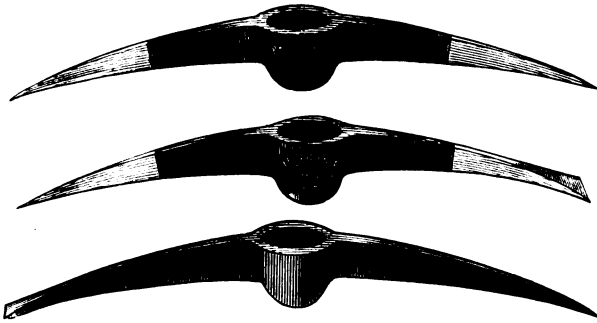
Stove Bolts.



PRICE PER HUNDRED.

Length.	$\frac{1}{4}$	Length.	$\frac{1}{4}$	Length.	$\frac{1}{4}$	Length.	$\frac{1}{4}$
$\frac{3}{4}$	65	1 $\frac{1}{8}$	80	1 $\frac{3}{4}$	95	2 $\frac{1}{2}$	1 10
$\frac{7}{8}$	70	1 $\frac{1}{4}$	85	2	1 00	2 $\frac{3}{4}$	1 15
1	75	1 $\frac{1}{2}$	90	2 $\frac{1}{4}$	1 05	3	1 20

Picks.



AMERICAN IRON.

CAST-STEEL POINTS.

5 to 6 lbs. and under	\$14.00 per doz.
6 to 7 lbs.	15.00 per doz.
7 to 8 lbs.	16.00 per doz.
Without polished points, less	1.00 per doz.

. NORWAY IRON.

CAST-STEEL POINTS.

5 to 6 lbs. and under	\$18.00 per doz.
6 to 7 lbs.	19.00 per doz.
7 to 8 lbs.	20.00 per doz.
Without polished points, less	1.00 per doz.
Extra Railroad, triple portion of steel	22.00 per doz.

Crow Bars.



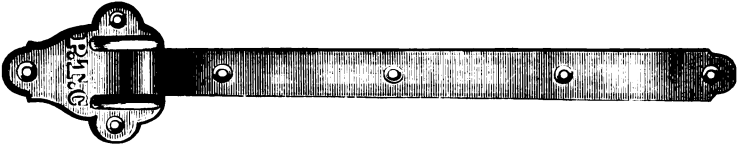
Best Cast-steel Points. Weight from 10 lbs. to 60 lbs. each, 9½ cts. lb.

Claw and Pinch Bars.

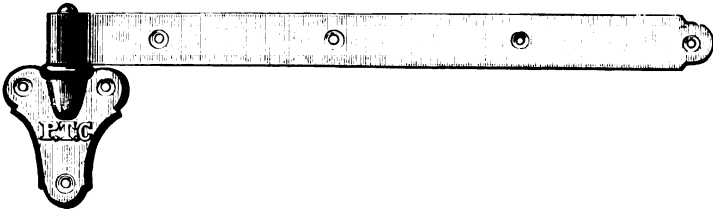


Best Cast-steel Points, 12 cts. lb. Made to order, any weight desired.

Plate Hinges.



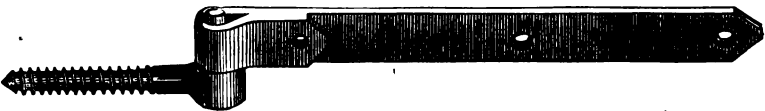
FAST AND LOOSE JOINTS.



Straps Tapered, and Holes Countersunk.

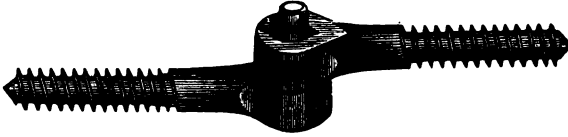
Width of Strap,	$\frac{5}{8}$ inch.	$\frac{3}{4}$ inch.
Length of Strap	6 inch.	8 inch.
Price per pound,	11 cts.	11 cts.
Width of Strap, $\frac{3}{4}$ $\frac{7}{8}$ 1 $1\frac{1}{8}$ $1\frac{1}{4}$ $1\frac{1}{2}$ $1\frac{3}{4}$ 2 inches.		
Length of Strap, 10 12 14 16 18 20 24 30 36 inches.		
9½ cents per pound.		

Screw Hook and Strap Hinges.



8, 10, and 12 inch, 11 cents per pound.
 14, 16, 18, 20, 22, 24, 26, 28, 30, and 36 inches long.
 9½ cents per pound.

Screw Hook and Eye Hinges.



$\frac{3}{4}$ to 1 inch diameter	12 cents per pound.
$\frac{5}{8}$ inch diameter	14 cents per pound.
$\frac{1}{2}$ inch diameter	16 cents per pound.

Hinge Nails.



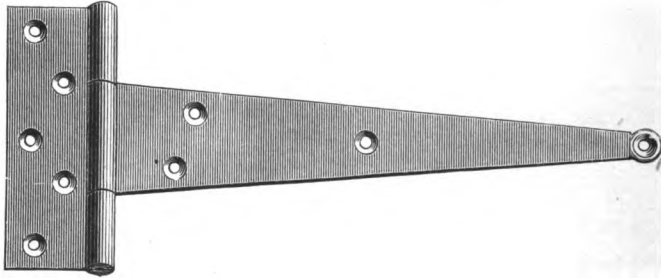
$\frac{1}{4}$ inch by	$1\frac{1}{2}$,	2,	$2\frac{1}{2}$,	3 inches.
20 cents per pound. Other lengths made to order.				

Cold Chisels.



Sizes,	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$ inch.
Price per dozen,	\$2.00	2.50	3.50	5.00
$\frac{7}{8}$ and 1 inch, 50 cts. per pound.				

Strap and T Hinges.



REVISED LIST ADOPTED AT A MEETING HELD AT THE CONTINENTAL HOTEL, PHILADELPHIA, OCTOBER 27, 1871, BY THE FOLLOWING MANUFACTURERS:

Roy & Co., Stanley Works; Lewis, Oliver, & Phillips;
E. W. Gilmore & Co.; Wheeling Hinge Co.; Riter
& Armor; M. Greenwood & Co.; and C. Hager
& Brother.

LIGHT STRAP HINGES.

3	4	5	6	7	8	10	12	14	inches.
75	90	1.10	1.35	1.75	2.00	2.75	4.50	5.75	per dz. pr.

HEAVY STRAP HINGES.

4	5	per	6	8	10	12	14	16	inches.
\$1 10	1.50	dz. pr.	13	13	12	11	11	11	cts. pr. lb.

LIGHT T HINGES.

3	4	5	6	8	10	12	14	inches.
75	85	1.00	1.20	1.50	1.90	2.80	4.25	per. dz. pr.

HEAVY T HINGES.

6	8	10	12	14	inches.
\$1.30	1.80	2.60	4.00	5.00	per dz. pr.

EXTRA HEAVY T HINGES.

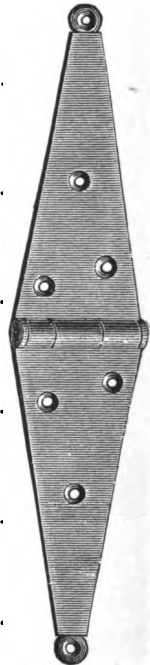
6	8	10	12	14	16	inches.
13	13	12	11	11	11	cts. per lb.

LONG CHEST HINGES.

6	8	10	12	14	inches.
\$1.25	1.50	2.00	2.50	3.00	per dz. pr.

Hasp and Staple or Padlock Hinges.

3	4½	6	8	10	inches.
\$1.75	2.00	2.25	3.50	4.75	per doz. pr.



Clinch Rings.

No. 1.

Please order by Numbers.

No. 2.



Straight Hole.



Countersunk Hole.

Sizes, $\frac{1}{2}$, $\frac{9}{16}$ inch hole. Price, 25 cts. per pound.

Sizes, $\frac{5}{8}$, $\frac{11}{16}$, $\frac{3}{4}$, $\frac{13}{16}$, $\frac{7}{8}$, $\frac{15}{16}$, 1, $1\frac{1}{16}$, $1\frac{1}{8}$, $1\frac{3}{8}$, $1\frac{1}{4}$, $1\frac{3}{4}$, $1\frac{1}{2}$ inch hole.

Price, 17 cts. per pound. Galvanized, 4 cts. per pound extra.



WARRANTED CLINCH RINGS.

Made from Norway Iron.

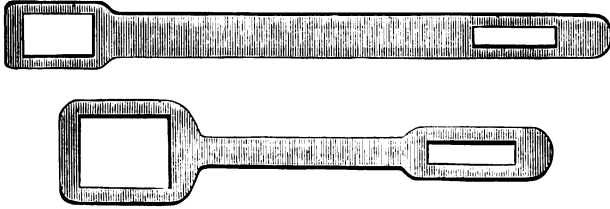
Warranted not to split in driving, or break in bending.

Sizes, $\frac{1}{2}$, $\frac{9}{16}$ inch hole. Price, 30 cts. per pound.

Sizes, $\frac{5}{8}$, $\frac{11}{16}$, $\frac{3}{4}$, $\frac{13}{16}$, $\frac{7}{8}$, $\frac{15}{16}$, 1, $1\frac{1}{16}$, $1\frac{1}{8}$, $1\frac{3}{8}$, $1\frac{1}{4}$, $1\frac{3}{4}$, $1\frac{1}{2}$ inch hole. Price, 25 cts. per pound.

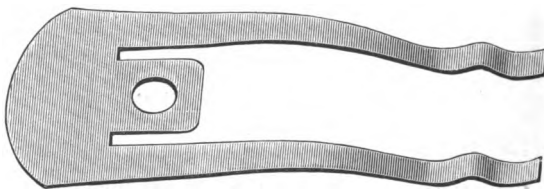
Galvanized, 4 cts. per pound extra.

Stirrups.



Description.	Number.	Length.	Price per Hundred.
Spinning	1	4 $\frac{1}{8}$ inches.	\$2.00
Spinning	2	4 $\frac{3}{8}$ inches.	1.75
Spinning	3	3 $\frac{1}{8}$ inches.	1.50
Spinning	4	4 $\frac{3}{8}$ inches.	2.00
Spinning	5	4 $\frac{7}{8}$ inches.	1.75
Spinning	6	4 $\frac{1}{2}$ inches.	1.75
Spinning	7	5 $\frac{1}{8}$ inches.	2.25
Spinning	8	5 inches.	2.25
Speeder	9	5 $\frac{7}{8}$ inches.	4.00
Spinning	10	5 $\frac{7}{8}$ inches.	2.50
Spinning	11	5 $\frac{1}{2}$ inches.	2.50
Spinning	12	5 $\frac{3}{8}$ inches.	2.50
Spinning	13	5 $\frac{1}{8}$ inches.	2.75
Spinning	14	5 $\frac{1}{2}$ inches.	2.50
Spinning	15	5 $\frac{7}{8}$ inches.	2.50
Spinning	16	3 $\frac{1}{8}$ inches.	1.50
Spinning	17	4 $\frac{5}{8}$ inches.	1.75

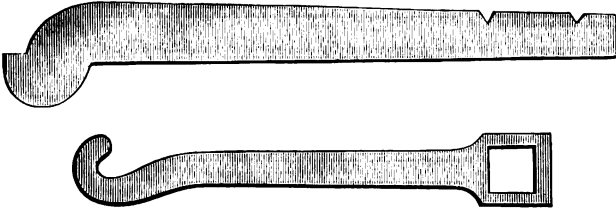
Clearer Springs.



A book containing diagrams of ten Clearer Springs, seventeen Stirrups, and seven Levers, showing exact size and shape, will be forwarded upon application.

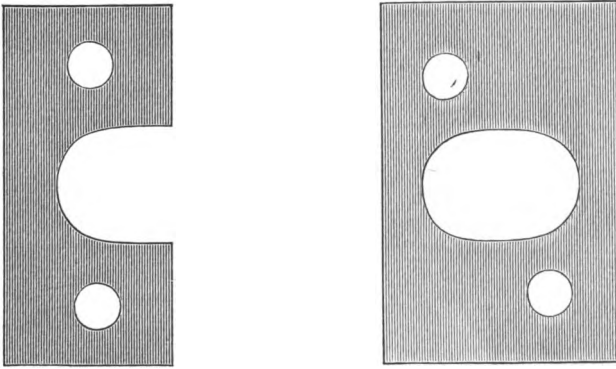
Price, \$3.00 per dozen.

Levers. .



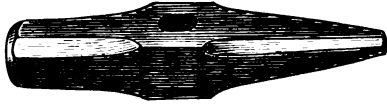
Description.	Number.	Length.	Price per Hundred.
	1	5½ inches.	\$2.00
	2	5½ inches.	2.00
	3	5½ inches.	2.00
	4	6½ inches.	2.50
	5	7 inches.	3.00
	6	7 inches.	3.00
	7	6½ inches.	2.50

Top Card Plates.



Description.	Length.	Price per Hundred.
Oblong.	2 inches.	\$1.25
Round.	2 inches.	1.50

Railroad Spike Mauls.



Steel Face and Point, 25 cents per lb. Weight from 3 lbs. to 9 lbs. each.

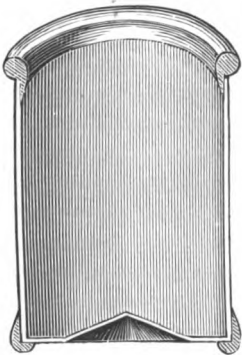
Top Mauls.



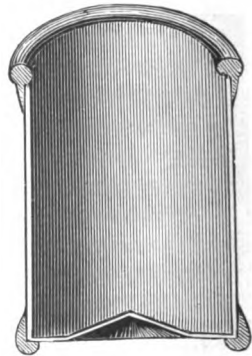
Steel Face and Points.

Weight from 3 to 9 pounds. Price, 25 cents per pound.

Tinned Can Rings, FOR FACTORY CANS.



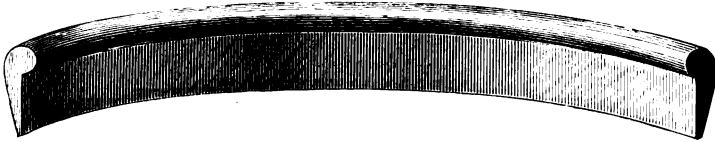
Section of Can showing position of Rings.
No. 3, Top. No. 1, Bottom.



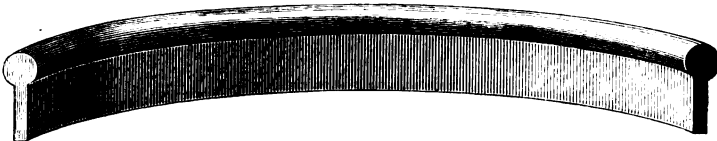
Section of Can showing position of Rings.
No. 2, Top. No. 1, Bottom.

Tinned Can Rings.

Section No. 1.



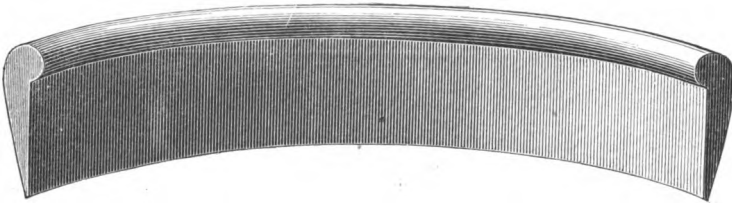
Section No. 2.



Section No. 3.



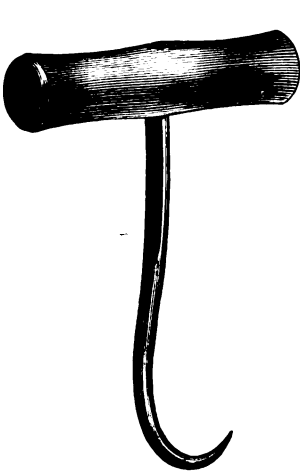
No. 4. Extra wide flanges.



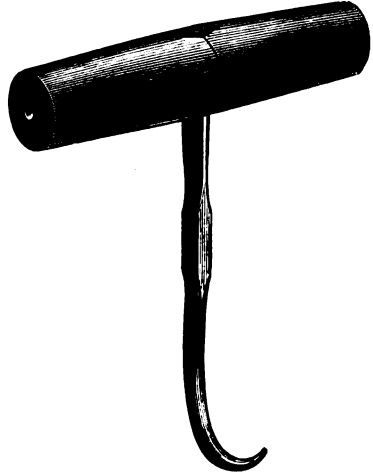
Size.	Price each.	Size.	Price each.
7 inches.	20 cents.	14 inches.	30 cents.
8 inches.	21 cents.	15 inches.	32 cents.
9 inches.	22 cents.	16 inches.	34 cents.
10 inches.	24 cents.	17 inches.	36 cents.
11 inches.	25 cents.	18 inches.	38 cents.
12 inches.	26 cents.	19 inches.	40 cents.
13 inches.	28 cents.	20 inches.	44 cents.

In ordering, please state exact size, and from what point measured, whether inside or outside of flange or round.

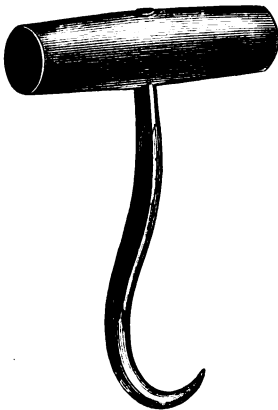
Cotton, Box, and Hay Hooks.



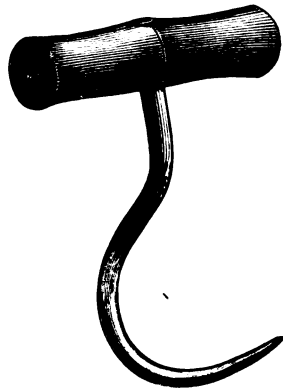
N. O. Cotton Hook.



Red River Hook.



Box or Cartmen's Hook.



California Hay Hook.

		Per doz.
No. 1.	Black Handle, 6 inch Blade	\$3.33
No. 2.	Black Handle, 8 inch Blade	4.00
No. 3.	Red River, Straight, Light Handle, to float	4.20
No. 4.	Box or Cartmen's, Varnished Handles, 6 in. Blade	4.20
No. 5.	Box or Cartmen's, Varnished Handles, 8 in. Blade	5.00
No. 6.	Hudson River Hay Hook, 5½ in. Blade	4.20
No. 7.	California Hay Hook, 6 in. Blade	5.00

All first quality stock, with Diamond Washers.

Wrought Iron Staples.



Galvanized.

Sizes,	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	1 $\frac{3}{4}$	2	2 $\frac{1}{4}$	2 $\frac{1}{2}$	2 $\frac{3}{4}$	inches.
Prices, \$	1.10	1.15	1.25	1.40	1.60	1.85	2.00	2.40	per gross.

Sizes,	3	3 $\frac{1}{2}$	4	4 $\frac{1}{2}$	5	6	inches.
Prices, \$	2.80	3.25	5.50	6.25	7.00	8.50	per gross.

Assorted.

1 $\frac{1}{2}$ to 3 inches, \$2.00 per gross.

1 $\frac{1}{2}$ to 3 $\frac{1}{2}$ inches, 2.50 per gross.

1 $\frac{1}{2}$ to 4 inches, 3.00 per gross.

Galvanized Iron Ferrules.



Polished.

Sizes,	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	1 $\frac{1}{8}$	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	inches.
Prices, 50	60	75	1.10	1.60	2.30	2.60	3.25	4.00	4.75	8.00		per gross.

Assorted.

$\frac{1}{4}$ to 1 $\frac{1}{8}$ inches, \$1.75 per gross.

$\frac{1}{4}$ to 2 inches, 2.25 per gross.

This new Ferrule overcomes all objections heretofore brought against Iron Ferrules. Being galvanized, can never rust, and they are made sufficiently light to insure a neat, handsome Ferrule, and both cheaper and stronger than brass.

Weight of Round Rolled Iron, One Foot in Length.

Diameter.	Wei'ht.	Diameter.	Weight.	Diameter.	Weight.	Diameter.	Weight.	Diameter.	Weight.
$\frac{1}{16}$	.010	$\frac{1}{8}$	2.333	$2\frac{1}{2}$	11.988	$3\frac{7}{8}$	39.864	$5\frac{1}{2}$	80.304
$\frac{1}{8}$	.041	1	2.654	$2\frac{3}{8}$	13.440	4	42.464	$5\frac{3}{4}$	84.001
$\frac{3}{16}$	.094	$1\frac{1}{8}$	2.997	$2\frac{7}{8}$	14.975	$4\frac{1}{2}$	45.174	$5\frac{7}{8}$	87.776
$\frac{1}{4}$	.165	$1\frac{1}{4}$	3.360	3	16.688	$4\frac{3}{4}$	47.952	6	91.634
$\frac{5}{16}$	.261	$1\frac{3}{8}$	3.744	$3\frac{1}{8}$	18.293	4 $\frac{7}{8}$	50.815	6 $\frac{1}{2}$	95.552
$\frac{3}{8}$	.373	$1\frac{1}{2}$	4.172	$3\frac{3}{8}$	20.076	5	53.760	6 $\frac{3}{4}$	103.704
$\frac{7}{16}$	.508	$1\frac{5}{8}$	4.573	$3\frac{7}{8}$	21.944	$5\frac{1}{8}$	56.788	6 $\frac{7}{8}$	112.160
$\frac{1}{2}$	.668	$1\frac{3}{4}$	5.019	3	23.888	$5\frac{3}{8}$	59.900	7	120.960
$\frac{9}{16}$	.840	$1\frac{7}{8}$	5.486	$3\frac{1}{2}$	25.926	$5\frac{5}{8}$	63.094	7 $\frac{1}{2}$	130.048
$\frac{5}{8}$	1.043	2	5.972	$3\frac{3}{4}$	28.040	5 $\frac{7}{8}$	66.752	7 $\frac{3}{4}$	139.544
$\frac{3}{4}$	1.255	$2\frac{1}{8}$	7.010	$3\frac{7}{8}$	30.240	6	69.731	8	149.328
$\frac{7}{8}$	1.493	$2\frac{3}{8}$	8.128	4	32.512	$6\frac{1}{8}$	73.172	$8\frac{1}{2}$	159.456
1	1.752	$2\frac{5}{8}$	9.333	$4\frac{1}{8}$	34.886	$6\frac{3}{8}$	76.700	9	169.856
$1\frac{1}{8}$	2.032	3	10.616	$4\frac{3}{8}$	37.332			10	180.696

Weight of Square Iron, One Foot in Length.

Size.	Wei'ht.	Size.	Weight.	Size.	Weight.	Size.	Weight.	Size.	Weight.
$\frac{1}{16}$	.013	$\frac{1}{8}$	2.971	$2\frac{1}{2}$	21.120	$4\frac{1}{4}$	61.055	$5\frac{7}{8}$	116.671
$\frac{1}{8}$	.053	1	3.380	$2\frac{3}{8}$	23.292	$4\frac{3}{8}$	64.700	6	121.664
$\frac{3}{16}$	.119	$1\frac{1}{8}$	3.816	$2\frac{7}{8}$	25.560	$4\frac{5}{8}$	68.448	$6\frac{1}{4}$	132.040
$\frac{1}{4}$	.211	$1\frac{1}{4}$	4.278	3	27.939	$4\frac{7}{8}$	72.305	$6\frac{3}{8}$	142.816
$\frac{5}{16}$	.330	$1\frac{3}{8}$	5.280	$3\frac{1}{8}$	30.416	5	76.264	$6\frac{5}{8}$	154.012
$\frac{3}{8}$	.475	$1\frac{1}{2}$	6.390	$3\frac{3}{8}$	33.010	$5\frac{1}{8}$	80.333	7	165.632
$\frac{7}{16}$	.647	$1\frac{5}{8}$	7.604	$3\frac{7}{8}$	35.704	$5\frac{3}{8}$	84.480	$7\frac{1}{4}$	177.672
$\frac{1}{2}$	.845	$1\frac{3}{4}$	8.926	4	38.503	$5\frac{5}{8}$	88.784	$7\frac{3}{4}$	190.136
$\frac{9}{16}$	1.069	2	10.352	$4\frac{1}{8}$	41.408	$5\frac{7}{8}$	93.168	8	203.024
$\frac{5}{8}$	1.320	$2\frac{1}{8}$	11.883	$4\frac{3}{8}$	44.418	6	97.657	$8\frac{1}{4}$	216.336
$\frac{3}{4}$	1.597	$2\frac{3}{8}$	13.520	$4\frac{5}{8}$	47.534	$6\frac{1}{8}$	102.240	$8\frac{3}{4}$	230.068
$\frac{7}{8}$	1.901	$2\frac{5}{8}$	15.263	$4\frac{7}{8}$	50.756	$6\frac{3}{8}$	106.953	9	244.220
1	2.231	3	17.112	5	54.084	$6\frac{5}{8}$	111.756	$9\frac{1}{4}$	258.800
$1\frac{1}{8}$	2.588	$3\frac{1}{8}$	19.066	$5\frac{1}{8}$	57.517			10	273.792

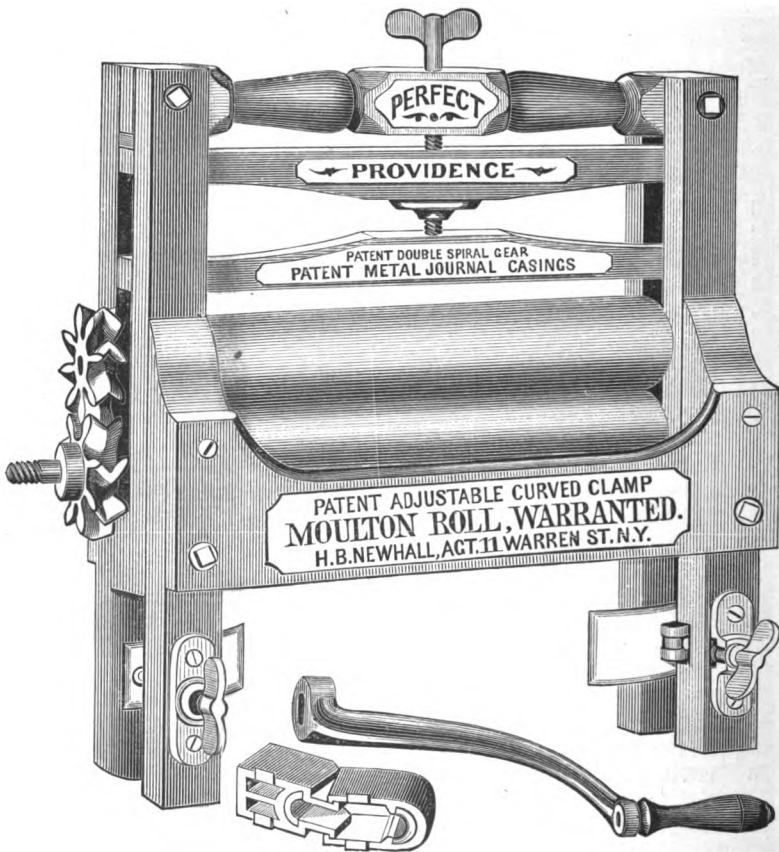
Weight of Flat Rolled Iron,

One Foot in Length.

WIDTH.	THICKNESS.									
	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{4}$
$\frac{1}{16}$	.422	.528	.634	.738	.845	1.056	1.265	1.477	1.690	2.112
$\frac{1}{8}$	.528	.660	.792	.923	1.056	1.320	1.584	1.846	2.112	2.640
$\frac{3}{16}$	.633	.792	.950	1.108	1.265	1.584	1.901	2.217	2.534	3.168
$\frac{1}{4}$	.738	.923	1.108	1.294	1.477	1.846	2.217	2.588	2.956	3.696
$\frac{5}{16}$	.845	1.056	1.267	1.478	1.690	2.112	2.534	2.956	3.380	4.224
$\frac{3}{8}$	.950	1.187	1.425	1.663	1.901	2.375	2.850	3.326	3.802	4.752
$\frac{7}{16}$	1.056	1.320	1.584	1.848	2.112	2.640	3.168	3.696	4.224	5.280
$\frac{1}{2}$	1.161	1.452	1.742	2.032	2.325	2.904	3.484	4.065	4.646	5.808
$\frac{5}{8}$	1.266	1.584	1.900	2.217	2.535	3.168	3.802	4.435	5.069	6.337
$\frac{3}{4}$	1.372	1.716	2.059	2.402	2.746	3.432	4.119	4.805	5.492	6.864
$\frac{7}{8}$	1.479	1.848	2.218	2.589	2.957	3.696	4.435	5.178	5.914	7.393
$1\frac{1}{8}$	1.584	1.980	2.376	2.772	3.168	3.960	4.752	5.544	6.336	7.921
$1\frac{1}{4}$	1.689	2.112	2.534	2.957	3.379	4.224	5.069	5.914	6.758	8.448
$1\frac{3}{8}$	1.795	2.244	2.693	3.141	3.591	4.488	5.386	6.283	7.181	8.977
$1\frac{1}{2}$	1.900	2.376	2.851	3.326	3.802	4.752	5.703	6.653	7.604	9.505
$1\frac{5}{8}$	2.006	2.508	3.009	3.511	4.013	5.016	6.019	7.022	8.025	10.032
$1\frac{3}{4}$	2.112	2.640	3.168	3.696	4.224	5.280	6.336	7.392	8.448	10.560
$2\frac{1}{8}$	2.323	2.904	3.485	4.066	4.647	5.808	6.970	8.132	9.294	11.617
$2\frac{1}{4}$	2.535	3.168	3.802	4.435	5.069	6.337	7.604	8.871	10.138	12.673
$2\frac{3}{8}$	2.746	3.432	4.119	4.805	5.492	6.865	8.237	9.610	10.983	13.730
$2\frac{1}{2}$	2.957	3.696	4.436	5.175	5.914	7.393	8.871	10.350	11.828	14.785
$2\frac{5}{8}$	3.168	3.960	4.752	5.544	6.336	7.921	9.505	11.089	12.673	15.841
$3\frac{1}{8}$	3.380	4.224	5.069	5.914	6.759	8.448	10.138	11.828	13.518	16.897
$3\frac{1}{4}$	3.802	4.752	5.703	6.653	7.604	9.504	11.406	13.306	15.208	19.010
$3\frac{3}{8}$	4.224	5.280	6.336	7.392	8.449	10.560	12.673	14.784	16.897	21.122
$3\frac{1}{2}$	4.647	5.808	6.970	8.132	9.294	11.616	13.940	16.264	18.587	23.234
$4\frac{1}{8}$	5.070	6.337	7.604	8.871	10.138	12.674	15.208	17.742	20.276	25.346

What is Home without a Wringer?

— — —
THE BEST AND CHEAPEST IS THE



Having had unusual opportunities of ascertaining precisely what is wanted, and of producing a perfect machine, we have brought out an entirely NEW WRINGER, which we call the

“PROVIDENCE.”

The wooden journals in which the iron shafts of other machines run, soon wear, and the efficiency of the wringer is thereby greatly reduced. In the PROVIDENCE we have

PATENT METAL JOURNAL CASINGS,

which are indestructible.

These casings are fitted with a DOUBLE STOP, so that the cogs cannot bottom, nor can they be thrown out of gear.

This casing is the greatest improvement which has for a long time been made in Clothes Wringers. Besides this, we have put upon the PROVIDENCE a new

PATENT DOUBLE SPIRAL GEAR.

The cogs of this gear are of V shape, and whether single or double gears are used, the shafts cannot be moved out of place. This makes a single gear machine quite as good as a double gear, and less expensive. We however make both, in order to *please everybody*.

Another grand improvement brought out in the PROVIDENCE is the new

PATENT ADJUSTABLE CURVED CLAMP.

This is a great improvement upon the curved clamp used upon other machines. It is far stronger, and is perfectly adjustable to any size or shape of tub, whether the tub is round or square, and whether of large or small diameter.

The general workmanship of this machine is also perfect. The INDESTRUCTIBLE WHITE RUBBER MOULTON ROLL, described on another page, is used in every “PROVIDENCE” WRINGER, and the whole machine is complete in every part.

It is worth fifty per cent. more than any other Wringer, and yet is sold as cheap as any which is offered as a first-class machine.

No Wringer has ever comprised so many VALUABLE IMPROVEMENTS. Its superiority to all others will at once be acknowledged upon examination. It is fully

Warranted by the Manufacturers.

The Providence Wringer,

NEW. PERFECT.

Superior to all others for the following reasons:—

1st. The **ROLLERS**, of large size and best quality of White Rubber, are all secured to their Shafts in the most permanent manner, by the **MOULTON PROCESS**, making the **BEST ROLLER IN THE WORLD**.

2d. The **PATENT METAL JOURNAL CASINGS** prevent any wear upon the journals.

3d. The **DOUBLE SPIRAL COGS** used on this Wringer, give the utmost ease and steadiness in working, while the double stop prevents them from bottoming or being thrown out of gear. We furnish either single or double gear **PROVIDENCE**, as desired.

4th. The **ADJUSTABLE CURVED CLAMP** readily adjusts this Machine to tubs of any size or thickness, making a perfect fastening. No wooden pegs or rubber straps on this Clamp.

5th. **SIMPLICITY, STRENGTH, and BEAUTY**, are combined in this Machine, with all the requisites of a first-class Wringer.

PRICES AND TERMS.

	At Retail.	Less than 2 doz. at one shipment.	2 doz. at one shipment.	5 doz. at one shipment.	10 doz. at one shipment.
Extra, No. 2, Family Size — Rolls 10x1½ in.	\$8 00	\$74 00	\$72 00	\$70 00	\$68 00
"Household," Friction, No. 2, Family Size — Rolls 10x1½ in.	7 00	62 00	60 00	58 00	56 00
No. 3, Large Family Size — Rolls 11x1½ in.	9 00	83 00	81 00	79 00	77 00
No. 4, Hotel Size — Rolls 12x2½ in.	12 00	110 00	107 00	104 00	102 00

TERMS OF PAYMENT.

Drawback or discount on 20 dozen Wringers purchased in 6 months, \$1.00 per dozen.

Drawback or discount on 40 dozen Wringers purchased in 6 months, \$1.50 per dozen.

One per cent. discount for cash within 15 days from date of shipment.

Interest after 30 days, if payment is not made within 45 days.

Delivered free of freight at New York or Boston.

Orders for 2, 5, or 10 dozen must be filled at one shipment, but may include both kinds and all sizes.

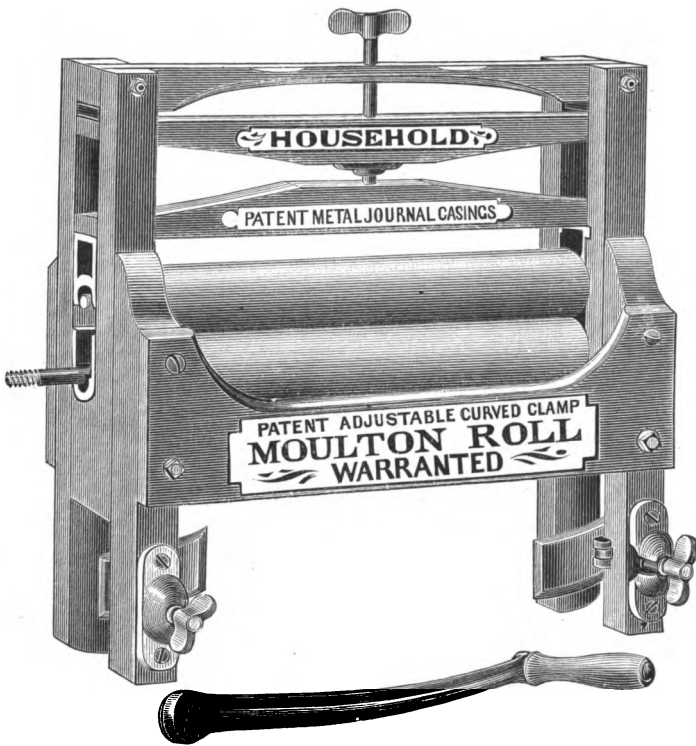
The **PROVIDENCE** is the most saleable Wringer in use, fully warranted, and will give entire satisfaction.

Freight prepaid to New York or Boston.

A GOOD WRINGER IN A HOME

Makes Washing Day Welcome.

THE



Combines all the excellences and improvements of every Wringer hitherto constructed without GEARS or COGS.

It has the celebrated METAL JOURNAL CASINGS, effectually preventing any wear by the Shaft of the Rolls in the frame. It also has the PATENT ADJUSTABLE CURVED CLAMP, the most mechanical of all Clamps, ever adopted or tried.

THE PROVIDENCE

IS NOW MANUFACTURED IN THREE SIZES,

THE FAMILY WRINGER (Extra, or No. 2).

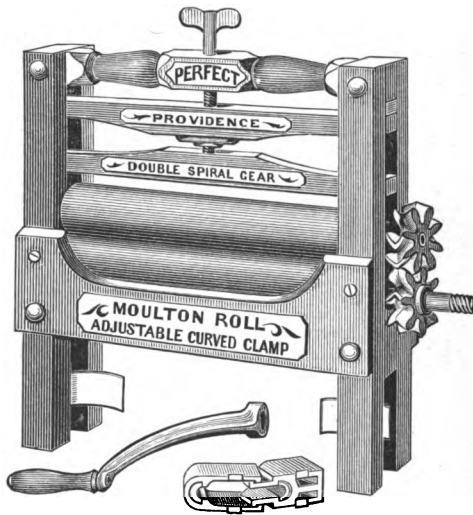
Ten Inch Rolls. Diameter $1\frac{1}{8}$ inches. Price, \$8.00.

LARGE FAMILY SIZE (No. 3).

Rolls $11 \times 1\frac{1}{8}$ inch. Price, \$9.00.

THE HOTEL WRINGER (or No. 4).

Twelve inch Rolls. Diameter $2\frac{1}{4}$ inches. Retail Price, \$12.00.



These three sizes will meet the wants of nearly all classes. The Machine is better adapted by its adjustable curved clamp to use on Round or Square Tubs, or on Washing Machines, than any other Wringer constructed.

DEALERS

are expected to maintain prices, and those residing in distant States will add to the published rates the proper amount for freight.

The Cut on next page illustrates the celebrated

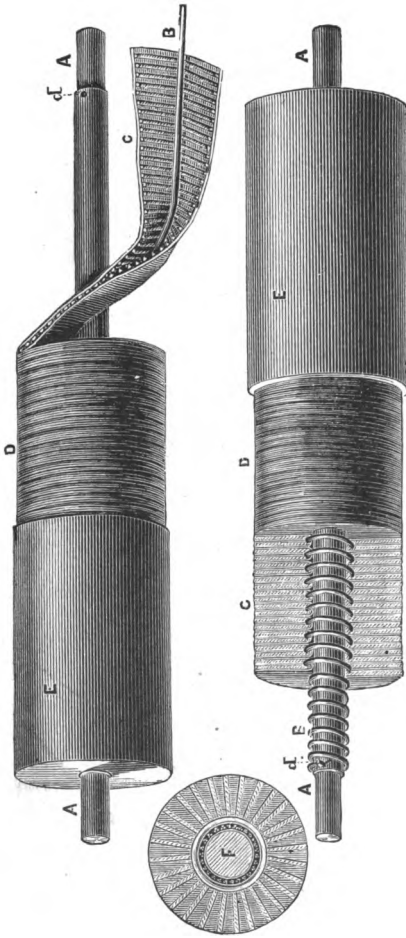
Moulton Roll,

now used in all PROVIDENCE WRINGERS. It is secured to the shaft by a strong wire embedded in the rubber, wound spirally from end to end of the roll, and keyed into the shaft at suitable points. This wire binds down the fibres which are incorporated with the rubber, thus holding every portion of it firmly to the shaft, without lessening its elasticity. Every roll is thus made on the shaft on which it is to be used, and *cannot be twisted from it by any fair means.*

WE WARRANT THEM IN EVERY RESPECT.

The rubber is of better quality than was ever put into a Wringer Roll before, — containing no shoddy, or refuse rubber ground over, but consisting entirely of a very tough, pliable compound, having a large proportion of the best Para gum. We use solid white rolls of *greater* diameter than any other Family Wringer.

Some of the smaller manufacturers of Wringing Machines are also using the Moulton Roll. The UNIVERSAL and NOVELTY, however, while striving to suppress all competition, still cling to the old-fashioned tube roll, with its black rubber centre. Such a roll certainly costs much less than ours, but cannot compare with it in durability.



DESCRIPTION OF THE MOULTON ROLL.

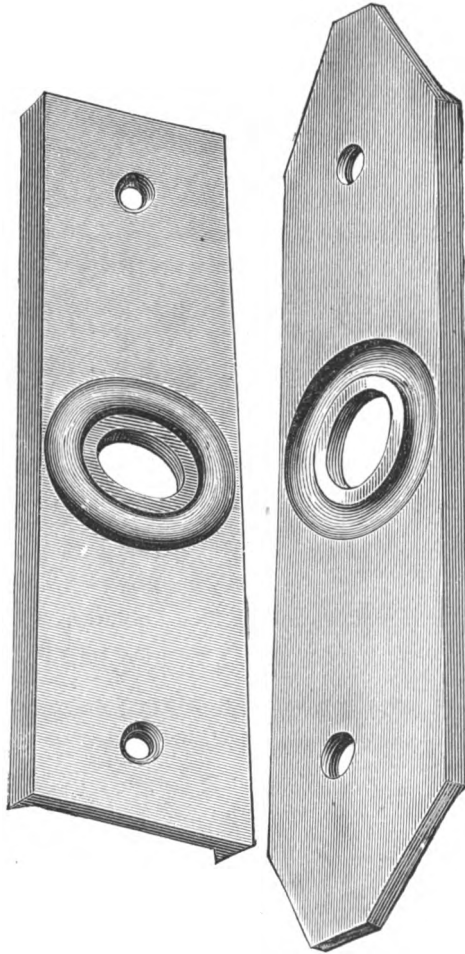
A, is the central shaft to which the elastic covering is secured by the flexible wire, *B*, which is keyed into the shaft at each end (as at *d*). and is wound spirally the entire length of the roller, holding under it the sheet of raw rubber compound and of fibrous material, which, by its continuous winding, makes up the body of the roller, *D*, to which is added the smooth outer coating *E*. The whole is then vulcanized together, and is ready for use.

The process of vulcanizing, which cures the rubber, unites the various coils to each other and to the outer coating, and secures the elastic body of the roller immovably upon its shaft.

The cut at the left shows the roller in section, and indicates the position taken by the fibres which are intermingled with the rubber. It will be observed that these fibres resist any tendency of the rubber, when under pressure, to part from or move on the shaft, while they offer no resistance to that compression *towards* the shaft, which is the peculiar characteristic of a properly elastic roller.

WAGON HARDWARE.

Patent Wrought Iron Bolster Plate.



With Raised Circle on one Plate, and indented Circle in the other, same as Cast Iron Bolster Plate.

All the advantages of the Wrought and Cast Iron Plate combined.

Sizes,	2 $\frac{3}{4}$	3	3 $\frac{1}{4}$	3 $\frac{1}{2}$ inches wide, $\frac{3}{8}$ thick.
Price,	60	65	70	75 cents per set.

Patent Wagon Box Strap Bolt.

For prices, see page 55.

Five Sizes always in stock, and make any others to order.

10 inch by $\frac{7}{8}$ inch at Screw end.

12 inch by $\frac{1}{2}$ inch at Screw end.

12 inch by $\frac{5}{8}$ inch at Screw end.

14 inch by $\frac{5}{8}$ inch at Screw end.

16 inch by $\frac{5}{8}$ inch at Screw end.

These Bolts have received the approval of, and been adopted by most of the large Wagon Manufacturers in the West. They can be handled by Wagon Stock Dealers, and sold to Wagon Makers, at a less price per set, than they can do the work on them for, *not counting the cost of the Iron, Nuts, Waste in Scrap, etc.*



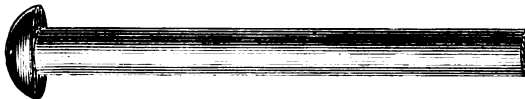
Extra Large Wagon Rivet.



Flat Head.

$\frac{3}{8}$ and $\frac{1}{2}$ inch diameter.

15 12 $\frac{1}{2}$ cents per pound.



Oval Head.

$\frac{3}{8}$ and $\frac{1}{2}$ inch diameter.

15 12 $\frac{1}{2}$ cents per pound.

Wagon Steeple Head Rivet.



$\frac{3}{8}$ and $\frac{1}{2}$ inch diameter.

15 12 $\frac{1}{2}$ cents per pound.

Patent Wagon Brake Ratchet.



Without Guard.



With Guard.

16½ cents each. Finished with guard, 45 cents each.

Wagon Hardware.

Embracing new novelties not before offered to the Trade.

Wagon Box Strap Bolts, 10 inches long by $\frac{7}{16}$ at Screw End. 55 cents per set of 8 bolts.

Wagon Box Strap Bolts, 12 inches long by $\frac{1}{2}$ at Screw End. 70 cents per set of 8 bolts.

Wagon Box Strap Bolts, 12 inches long by $\frac{5}{8}$ at Screw End. \$1.00 per set of 8 bolts.

Wagon Box Strap Bolts, 14 inches long by $\frac{5}{8}$ at Screw End. \$1.10 per set of 8 bolts.

Wagon Box Strap Bolts, 16 inches long by $\frac{5}{8}$ at Screw End. \$1.20 per set of 8 bolts.

5 cents per set for each additional inch over 14 inches by $\frac{5}{8}$. All lengths made.

Wagon Box Rods, narrow track 18 cents each.

Wagon Box Rods, wide track 20 cents each.

Single-Tree Irons 38 cents per set of 4 pieces.

Tongue Cap Iron, 1½, 2, and 2½ inches wide, same price per pound as Band Iron.

Wagon Chains, Stay Lock and Tongue, $\frac{1}{8}$ inch, 12 cents per pound net.

Wagon Chains, Stay Lock and Tongue, $\frac{1}{4}$ inch, 13 cents per pound net.

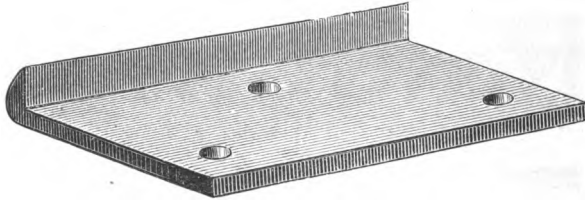
Stay Chain Hooks 8 cents per pound net.

Single Tree or End Clips 9 cents each.

Double Tree or Centre Clips, Light Pattern 10 cents each.

Double Tree or Centre Clips, Heavy Pattern 12 cents each.

Patent Wrought Rub Iron.



Far Superior to and Cheaper than the Malleable.

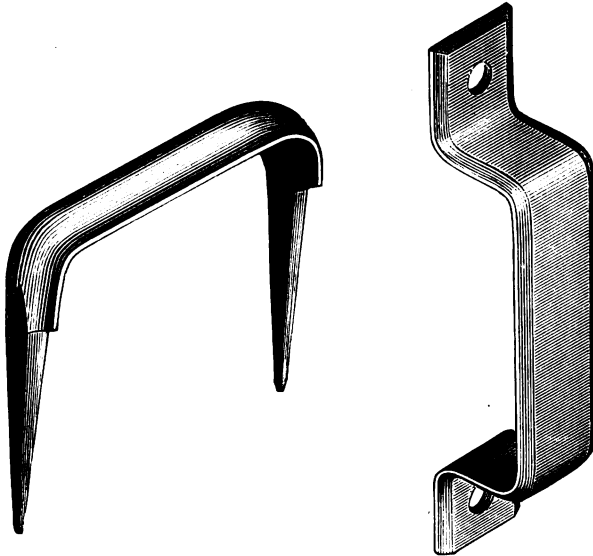
11 cents each.

Hinge and Wagon Nails.



$\frac{1}{4}$ inch diameter, all lengths. 20 cents per pound.

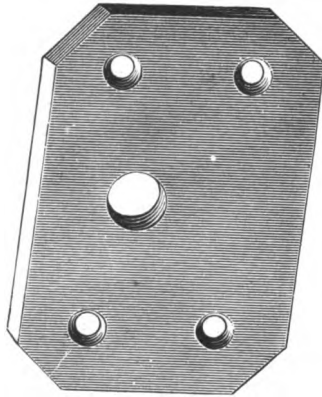
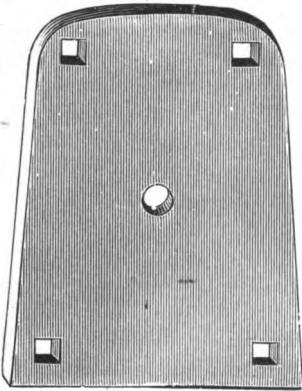
Wagon Box Staples.



Wagon Box Staples, $1\frac{1}{2}$ inch to $2\frac{1}{2}$ inches, to clinch, \$14.50 per 1000, net.

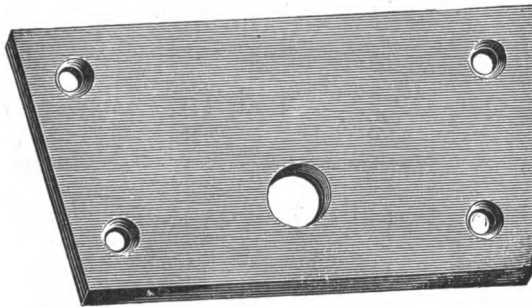
Wagon Box Staples, Box Iron, to rivet on, 11.00 per 1000, net.

WROUGHT IRON WROUGHT IRON
Coupling Plate. Double-Tree Plate.



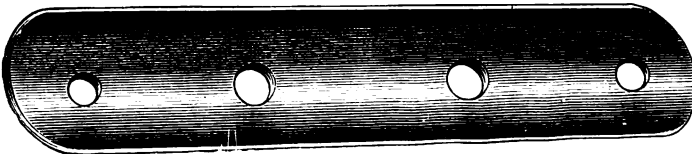
10 cents per pound, each. All sizes made.

Wrought Iron Tongue Plate.



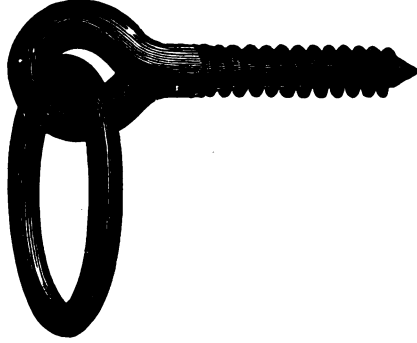
Price, 10 cents per pound. All Sizes made.

Wrought Iron Neck Yoke Plates.



Price, 12½ cents per pound. All sizes made.

Neck Yoke Eye and Ring.



Ring, $\frac{3}{8}$ inch. Shank, $\frac{9}{16}$ inch. Round Iron at Screw.
Price, 8 cents each, net.

Screw Hitching Ring.

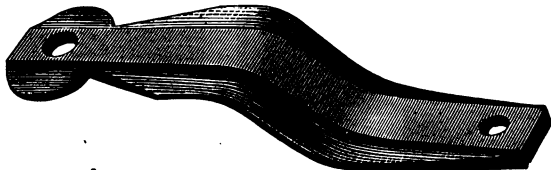
Same pattern. Ring, $\frac{1}{4}$ inch. Shank, $\frac{1}{2}$ inch.
Price, \$7.50 per 100.

Wagon, Box, or End Gate Rod.



Narrow Track, 18 cents, each. Wide Track, 20 cents each.

Patent Hammer Strap.



The Best Strap ever made, having all the strength where required. We make two sizes, Heavy and Light Patterns.

Wrought, heavy pattern, 16 cents each.

Wrought, light pattern, 13½ cents each.

Iron Wedges.

Price 7 cents per pound. All sizes.

Harrow Teeth.

In lots of One Ton or more, packed in casks.

1 inch diameter	6½ cents per pound.
$\frac{7}{8}$ inch diameter	6½ cents per pound.
$\frac{3}{4}$ inch diameter	6½ cents per pound.

Patent Headed Harrow Teeth.

Packed in casks $\frac{1}{8}$ per cent. per pound, extra.

Skein Bolts.

In bulk, in lots of 1 keg or more. 1 cent per pound extra, when less than 1 keg of each size is ordered.

$\frac{5}{8}$ inch diameter	8¼ cents per pound.
$\frac{9}{16}$ inch diameter	9¼ cents per pound.
$\frac{1}{2}$ inch diameter	10¼ cents per pound.

Cast Iron Washers.

5 cents per pound.

Bridge and Roof Bolts.

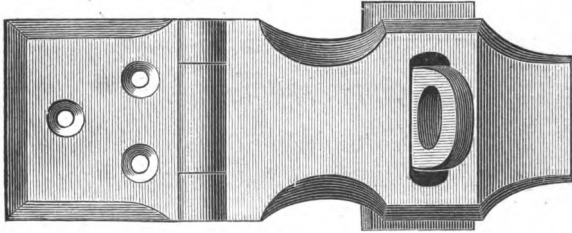
1 to 2 inches diameter, over 8 feet long,	6½ cents per pound.
1 to 2 inches diameter, from 4 to 8 feet long,	7 cents per pound.
1 to 2 inches diameter, from 1½ to 4 feet long,	7½ cents per pound.
$\frac{5}{8}$, $\frac{3}{4}$, and $\frac{7}{8}$ inch diameter, over 4 feet long,	7¾ cents per pound.
$\frac{5}{8}$, $\frac{3}{4}$, and $\frac{7}{8}$ inch diameter, from 1½ to 4 feet long,	8¼ cents per pound.

King Bolts.

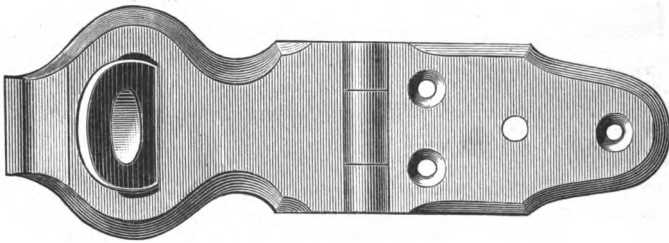
$\frac{7}{8}$, 1, 1½, 1¾ inch diameter, 6½ cents per pound.

Prices subject to change of market without notice.

Composition or Brass Hasp Hinges.



Length, 6 inches. Price, 55 cts. each. 80 cts. finished.



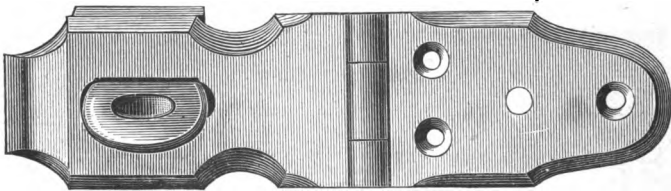
Length, 6½ inches. Price, 60 cts. each. 85 cts. finished.



Bolt.

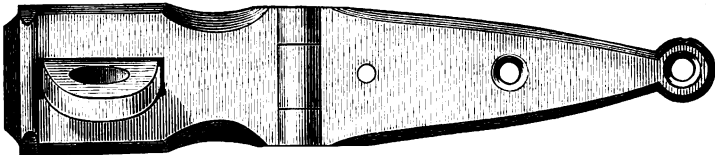


Washer.



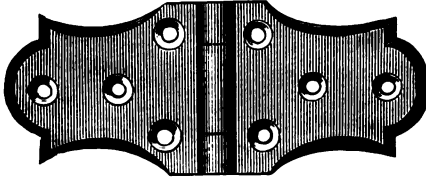
Length, 6½ inches. Price, 60 cts. each. 85 cts. finished.

Inverted Staples.



Length.	Price.	Finished.
6 inches.	50	75
8 inches.	75	1.00

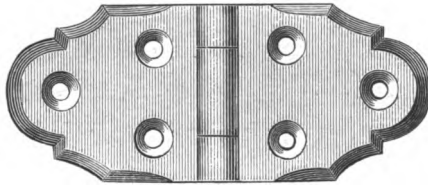
Heavy Brass Flap Hinges.



Length,	3½	5½	6¼ inches.
Price per pair,	35	45	90 cts.

Common Flap.

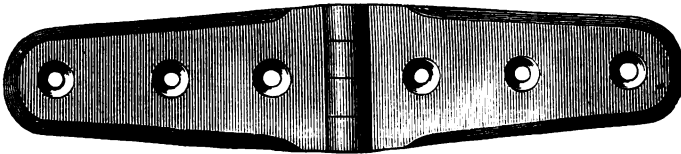
One Size.



Length, 5¼ inches. 85 cts. per pair.

Common Strap.

Heavy.



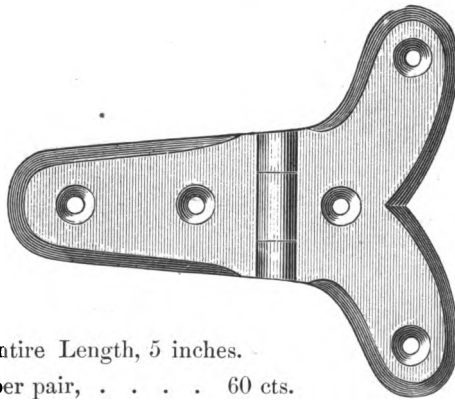
Length,	5	6	7	8	9	10	11	12	14 inches.
Price per lb.	60	60	50	50	50	50	50	50	50 cts.

Heavy Sky-Light Hinges.

Brass. Measured between Joints.

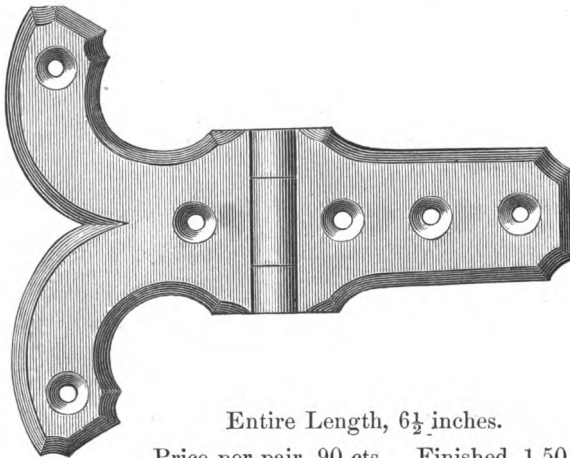
Length,	5	5½	6	7 in.
Price per pair,	2.60	2.65	2.75	2.85

Small Water Port Hinge.



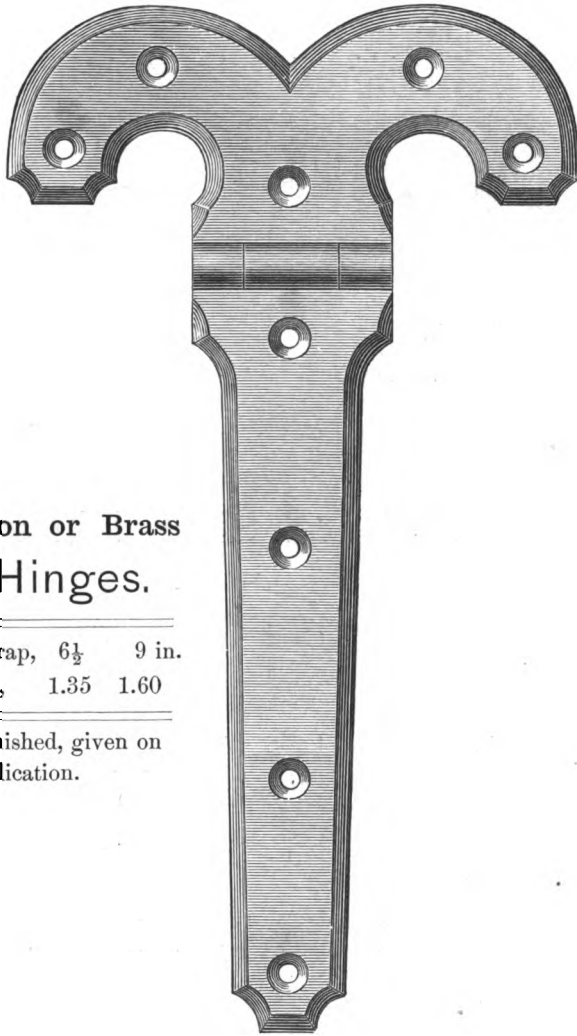
Entire Length, 5 inches.

Price per pair, 60 cts.



Entire Length, 6½ inches.

Price per pair, 90 cts. Finished, 1.50.



**Composition or Brass
Port Hinges.**

Length of Strap, 6½	9 in.
Price per pair,	1.35 1.60

Prices of finished, given on
application.

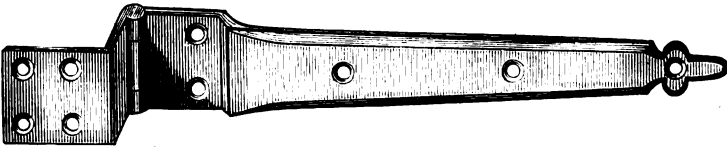
Composition Ship and Boat Spikes.



Prices given on application.

Finished Chest Hinges.

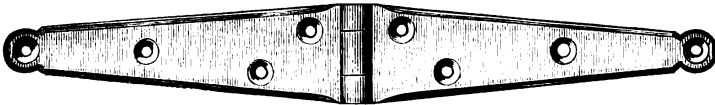
Brass.



Length,	6	7½	9 inches.
Price per pair,	1.25	1.50	1.75

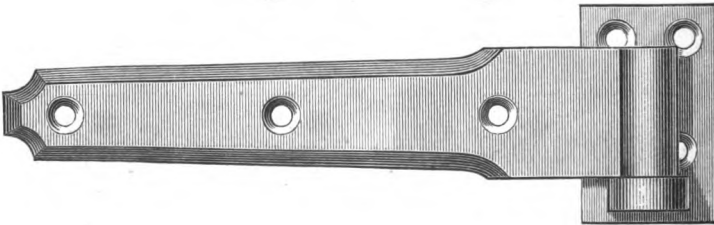
Finished Strap Hinges.

Heavy.



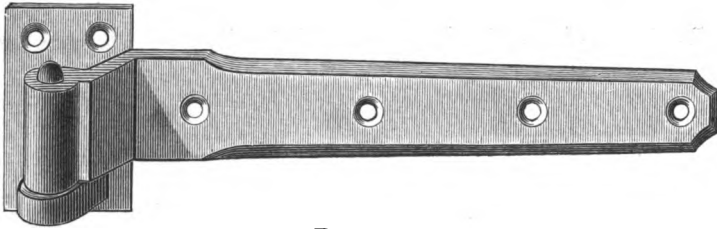
Length,	4	5	6	8	10 in.
Price per dozen,	7.00	9.00	11.50	17.00	25.00

Gangway Hinges.



Length,	6	8 in.	10	12 in.
Price per pair,	70	1.00	Per lb. 50	50 cts.

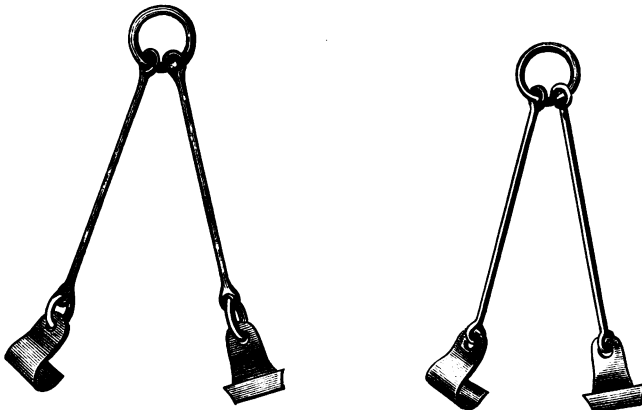
Heavy Offset Gangway Hinges.



Brass.

Length,	6	8	Length, 10	12
Price per lb.,	\$1.00	1.25	Price, 60	60 cts. lb.

Barrel or Can Hooks.



Sizes, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$ inch. Price, 20 cts. per pound.

Tin Fog Horns.



With Brass Reeds. Extra quality of Tin.

No. 1	2	3	4
14	20	35	40 inches long.
\$2.25	5.00	10.00	13.00 per dozen.

Galvanized Wrought Iron Hanks.



Single Stay.

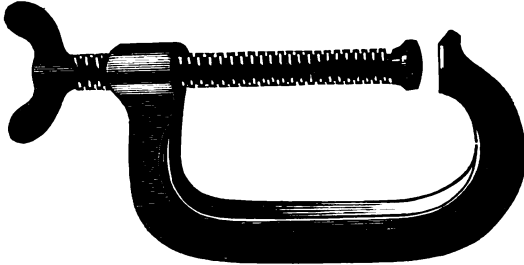
Inside diameter, inches,	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	1 $\frac{3}{4}$	2	2 $\frac{1}{4}$	2 $\frac{1}{2}$	2 $\frac{3}{4}$
Price per dozen,	65	70	75	80	90	\$1.00	1.15	1.30
Inside diameter, inches,	3	3 $\frac{1}{4}$	3 $\frac{1}{2}$	4	4 $\frac{1}{2}$	5	5 $\frac{1}{2}$	6
Price per dozen,	\$1.50	1.75	2.25	3.00	3.50	4.00	4.50	5.00



Double Stay.

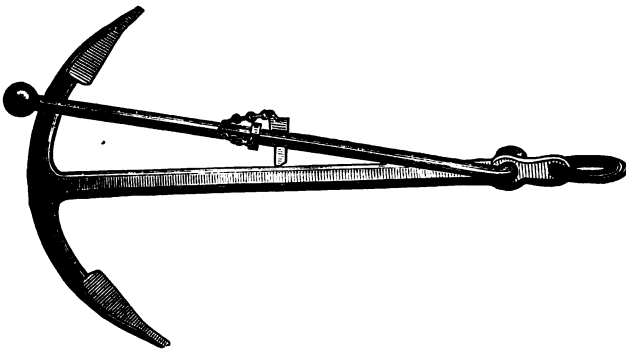
Inside long diam. in.	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	1 $\frac{3}{4}$	2	2 $\frac{1}{4}$	2 $\frac{1}{2}$	2 $\frac{3}{4}$
Price per dozen,	70	75	85	90	\$1.00	1.10	1.30	1.45
Inside long diam. in.	3	3 $\frac{1}{4}$	3 $\frac{1}{2}$	4	4 $\frac{1}{2}$	5	5 $\frac{1}{2}$	6
Price per dozen,	\$1.65	2.00	2.50	3.30	3.85	4.50	5.00	5.50

Screw Clamps.



No. 00	Width of opening 2 inches.	\$0.20 each.
No. 0	Width of opening 2½ inches.	.30 each.
No. 1	Width of opening 3 inches.	.40 each.
No. 2	Width of opening 4 inches.	.60 each.
No. 3	Width of opening 5½ inches.	.70 each.
No. 4	Width of opening 7 inches.	.85 each.
No. 5	Width of opening 8 inches.	1.00 each.
No. 6	Width of opening 10 inches.	1.25 each.

Anchors.



Size,	6 to 15 pounds.	Black wrought Iron, 16 cents.
Size,	15 to 30 pounds.	Black wrought Iron, 14 cents.
Size,	30 to 50 pounds.	Black wrought Iron, 13 cents.
Size,	50 to 100 pounds.	Black wrought Iron, 11 cents.
Size,	100 and larger.	Black wrought Iron, 11 cents.

Galvanized Anchors 4 cents per pound additional.

Ankle and Wrist Shackles.

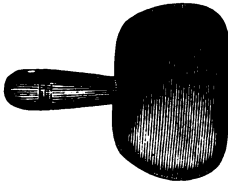


Ankle Shackles \$25.00 per dozen.

Wrist Shackles 15.00 per dozen.

Chains and Balls furnished of any length or weight.

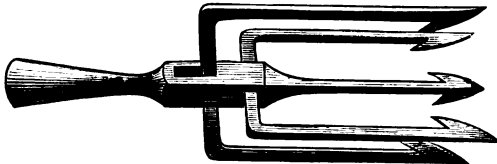
Walnut Mallets.



Diameter, 4	5	6	6½	7	7½	8 in.
Price, 75	85	\$1.00	1.45	1.75	2.00	2.25

Assorted, by the Barrel, \$38.00.

Five Prong Grains.



Price, \$20.00 per dozen.

Harpoons.



Price, \$16.00 per dozen.

Lily and Toggle Irons.



Steel. Pins.



Price, \$20.00 per dozen.

Ship Scrapers.



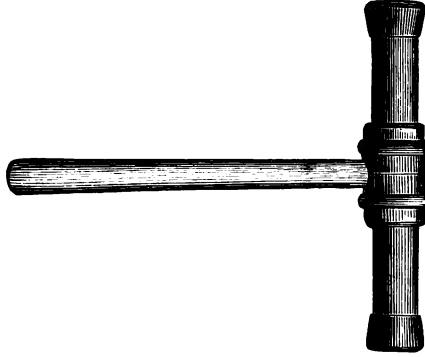
Gibbs's Patent.



Wood Handles. Triangular Blades. Wrought Iron Sockets.

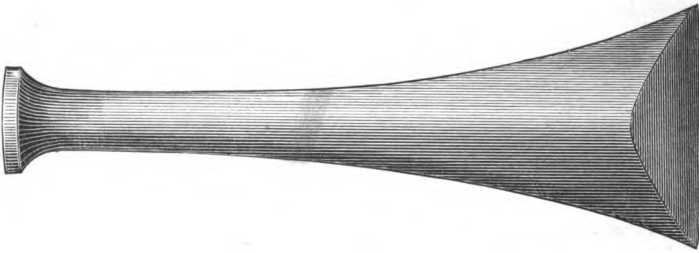
- No. 1. Blades, $\frac{1}{4}$ inch thick, iron and steel welded \$7.50 per doz.
- No. 1 $\frac{1}{2}$. Blades, $\frac{1}{4}$ inch steel, extra finish . . . 12.00 per doz.
- No. 2. Blades from No. 14 best cast steel . . . 5.50 per doz.
- No. 3. Blades from No. 14 steel, black sockets . 3.50 per doz.
- No. 4. Blades from No. 14 steel, 2 $\frac{1}{2}$ inches square 5.50 per doz.
- No. 5. Blades from No. 14 steel, 5 feet handles . 9.00 per doz.

Calking Mallets.



No. 0, Steel Rings, Polished Wood, made to order, per doz.	\$32.00
No. 1, Steel Rings, Polished Wood, made to order, per doz.	25.00
No. 2, Steel Rings, Varnished Wood, regular	24.00
No. 3, Steel Rings, Varnished Wood, second quality . . .	21.00
No. 4, Iron Rings, Polished Wood, extra	24.00
No. 5, Iron Rings, Polished Wood	22.50
No. 6, Iron Rings, Varnished Wood, regular	20.00
No. 7, Iron Rings, Varnished Wood, second quality . . .	18.00
No. 8, Iron Rings, Polished Wood, White Oak	15.00

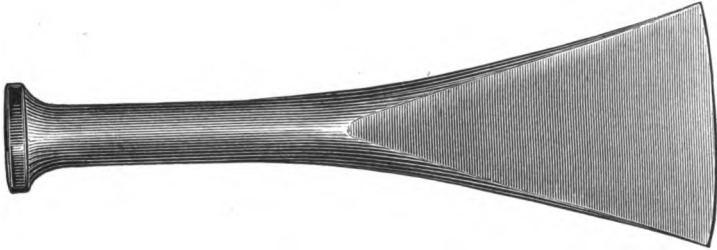
Calkers' Tools.



Marked Prov. Tool Co. Best Cast-Steel.

	Per doz.		Per doz.
Calking Irons	\$8.00	Single Crook Irons . . .	\$10.00
Making Irons	8.00	Double Crook Irons . . .	10.50
Sharp Irons	10.50	Treenail Irons	6.50
Deck Irons	9.00	Coppering Hammers . . .	12.00
Clearing Irons	7.00	Coppering Punches . . .	6.00
Spike Irons	6.50		

Calking Irons.



Marked P. T. C.

No. of Crease,	0	1	2	3
Price per dozen,	\$4.50	4.62½	4.75	4.87½ per doz.



Bent or
Single Crook.



Sharp.



Reefing or
Clearing.



Spike.



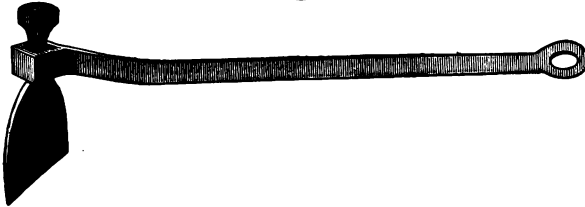
Double
Crook.



Dumb or
Deck.

Price, \$5.50 per dozen.

Hawsing Irons.

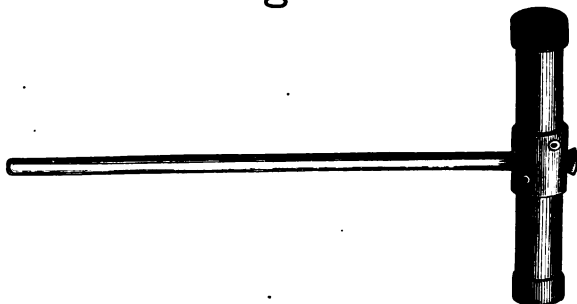


Steel Faced.

Price per dozen, black, \$15.00.

Polished, \$17.00 per dozen.

Hawsing Mallets.



Price per dozen, Live Oak, extra, \$26.50.
 Price per dozen, Live Oak, . . 21.50.
 Price per dozen, White Oak, . 19.50.

Marline Spikes.



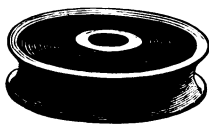
Japanned, Steel Points.

Sizes, 10, 11, 12, 13, 14, 15, 16 inch. Price 18 cents per pound.

Polished, Steel Points.

Sizes,	10	11	12	13	14	15	16 inches.
Price,	\$4.00	4.50	5.00	5.50	6.50	7.50	9.50 per dozen.

Galvanized Iron Sheaves.



Width of Score, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{1}{2}$ inch.

Diam. of Sheave, $\frac{7}{8}$, $1\frac{1}{8}$, $1\frac{3}{8}$, $1\frac{1}{2}$ inch.

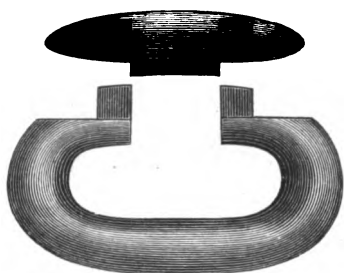
Price, 25 cts. per pound.

Width of Score, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$ inch.

Diam. of Sheave, $1\frac{3}{4}$, $2\frac{1}{4}$, $2\frac{3}{4}$, $2\frac{1}{2}$, $3\frac{1}{4}$, $4\frac{1}{4}$ inch.

Price, 16 cts. per pound.

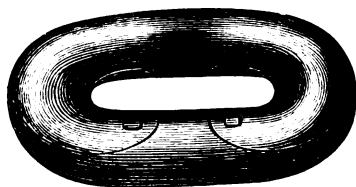
IMPROVED Wrought Iron Connecting Shackle.



Size corresponds with Size of Chain.

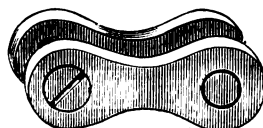
Size of Wire, $\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{8}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$1\frac{1}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1 in.
Per dozen, \$2.50	2.63	2.75	2.88	3.00	3.25	3.50	3.75	4.00	5.00	6.00

THOMPSON'S Patent Connecting Shackles.



Size Iron, $\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{8}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$1\frac{1}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1 in.
Per dozen, \$2.50	2.60	2.75	2.87	3.10	3.38	3.62	4.00	4.25	6.00	7.25

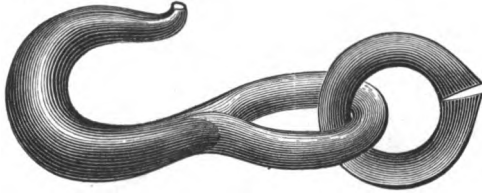
Connecting Shackle.



Size corresponds with Size of Chain.

Sizes, $\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1 inch.
Price, \$1.75	1.87 $\frac{1}{2}$	2.00	2.12 $\frac{1}{2}$	2.25	2.37 $\frac{1}{2}$	2.75 per dozen.

Tackle Hooks and Thimbles.



For Size, Measure Diameter of Iron in the Middle of Bend.

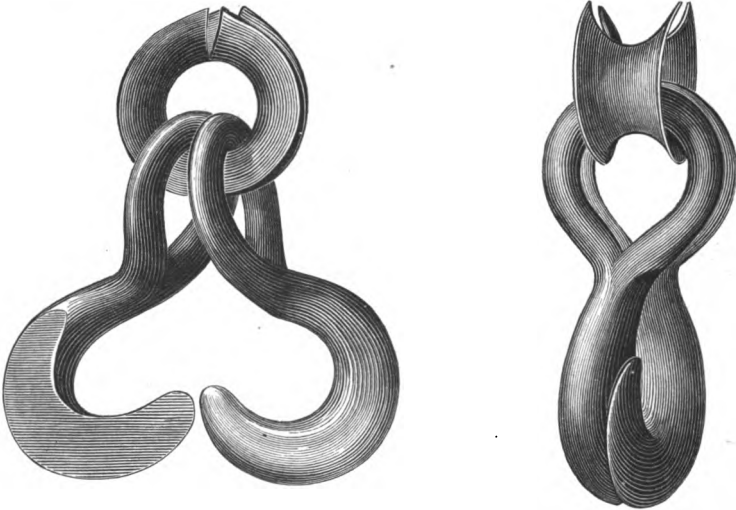
Sizes, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{8}$, $\frac{1}{2}$ inch.

Price per dozen, Japanned, \$1.50. Galvanized, \$1.75.

Sizes, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$, $1\frac{5}{8}$, $1\frac{3}{4}$, 2, $2\frac{1}{4}$, $2\frac{1}{2}$ inch.

Price per pound, Japanned, 15 cts. Galvanized, 19 cts.

MATCH OR Sister Hooks and Thimbles.



For Size, Measure Diameter of Iron in the Middle of Bend, with Hooks Closed.

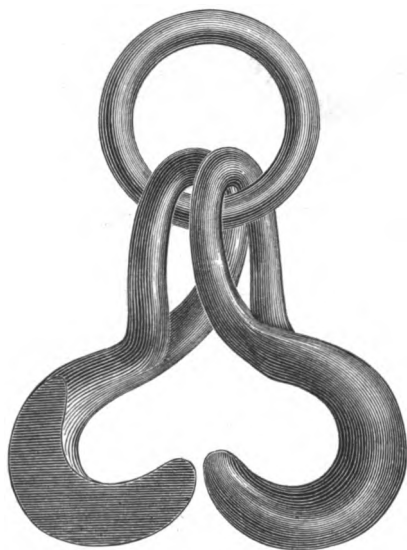
Sizes, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{7}{8}$, $\frac{1}{2}$ inch.

Price per dozen, Japanned, \$2.00. Galvanized, \$2.50.

Sizes, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$, $1\frac{5}{8}$, $1\frac{3}{4}$ inch.

Price per pound, Japanned, 18 cts. Galvanized, 22 cts.

Ring Match Hooks.

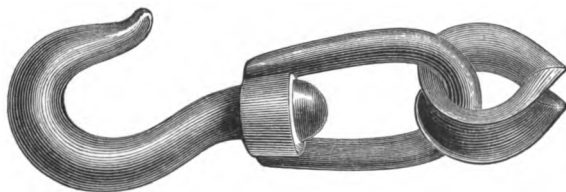


With or without Thimbles. Measure the same as Match Hooks.

Sizes, $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$ inch.

Price per pound, Japanned, 15 cts. Galvanized, 19 cts.

Swivel Hooks.



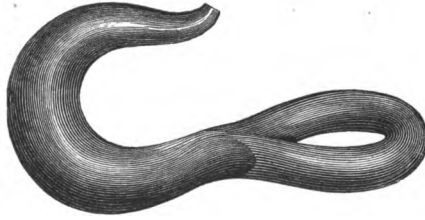
With or without Thimbles. Measure the same as Tackle Hooks.

Sizes, $\frac{1}{2}$, $\frac{3}{4}$ inch, \$3.00 per dozen.

Sizes, $\frac{3}{4}$, 1 inch, 30 cts. per pound. 1, $1\frac{1}{8}$, $1\frac{1}{4}$ inch, 25 cts. per pound.

Galvanized, 4 cts. per pound extra.

Small Eyed Block Hooks.



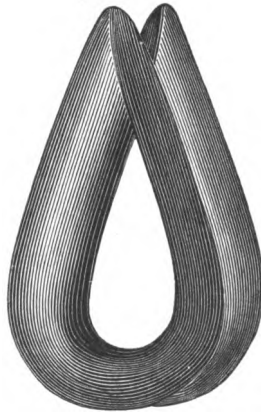
Single.

$\frac{3}{8}$ and $\frac{1}{2}$ inch, Black, \$2.00 per dozen. Galvanized, \$2.25 per dozen.
 $\frac{5}{8}$ to 2 inches, Black, 16 cts. per lb. Galvanized, 20 cts. per lb.

Double.

$\frac{3}{8}$ and $\frac{1}{2}$ inch, Black, \$2.50 per dozen. Galvanized, \$2.75 per dozen.
 $\frac{5}{8}$ to 2 inches, Black, 20 cts. per lb. Galvanized, 24 cts. per lb.

Wire Rope Thimbles.

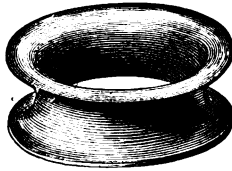


Galvanized.

Size of Rope,	1	1½	2	2½	3	3½	4	4½	5	inch.
Width of Score,	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	1½	1¾	1½	1¾	inch.
Price,	16	18	19	21	32	38	45	55	65	cts. each.

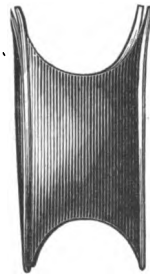
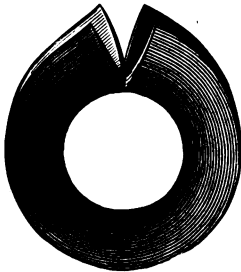
The size of rope corresponds with the size of rope the thimbles are required to fit.

HEAVY Wrought Iron Welded Thimbles.



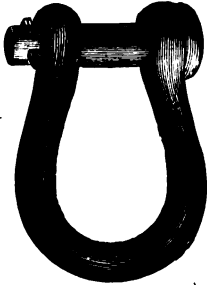
Outside Diam.	Inside Diam.	Width of Score.	Japanned, per doz.	Galvanized, per doz.
1	$\frac{5}{8}$	$1\frac{5}{8}$	\$0.28	\$0.36
$1\frac{1}{4}$	$\frac{7}{8}$	$\frac{3}{8}$	.28	.36
$1\frac{1}{2}$	$1\frac{1}{8}$	$1\frac{7}{8}$	.32	.42
$1\frac{3}{4}$	$1\frac{1}{4}$	$1\frac{9}{8}$	.34	.48
2	$1\frac{7}{8}$	$\frac{5}{8}$	.41	.54
$2\frac{1}{4}$	$1\frac{5}{8}$	$1\frac{1}{8}$	.45	.62
$2\frac{1}{2}$	$1\frac{3}{8}$	$\frac{3}{4}$	.50	.70
$2\frac{3}{4}$	2	$1\frac{3}{8}$	.60	.85
3	$2\frac{1}{8}$	$\frac{7}{8}$	.80	1.00
$3\frac{1}{4}$	$2\frac{3}{8}$	$1\frac{5}{8}$	1.00	1.45
$3\frac{1}{2}$	$2\frac{1}{2}$	1	1.30	1.65
$3\frac{3}{4}$	$2\frac{1}{8}$	$1\frac{1}{8}$	1.60	1.85
4	$2\frac{7}{8}$	$1\frac{3}{8}$	1.80	2.25
$4\frac{1}{4}$	3	$1\frac{1}{4}$	2.00	2.76
$4\frac{1}{2}$	$3\frac{1}{4}$	$1\frac{5}{8}$	3.00	3.75
$4\frac{3}{4}$	$3\frac{7}{8}$	$1\frac{3}{8}$	4.00	5.00
5	$3\frac{9}{8}$	$1\frac{1}{2}$	6.00	7.50

Open Thimbles.

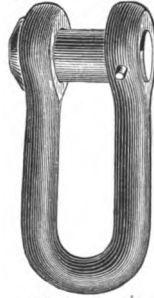


Outside diameters, $\frac{7}{8}$, 1, $1\frac{1}{4}$ inch. Price, 24 cts. per dozen.
 Outside diameter, $1\frac{3}{8}$, $1\frac{1}{2}$, $1\frac{3}{4}$, 2, $2\frac{1}{4}$, $2\frac{1}{2}$, $2\frac{3}{4}$, 3, $3\frac{1}{4}$, $3\frac{1}{2}$, $3\frac{3}{4}$, 4,
 $4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6 inches. Price, 17 cts. per pound.
 Galvanized, 4 cts. per pound extra.

Anchor and Chain Shackles.



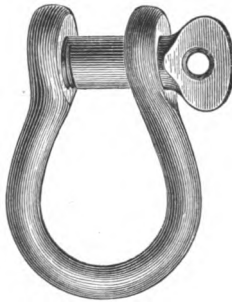
Anchor Shackle.



Chain Shackle.

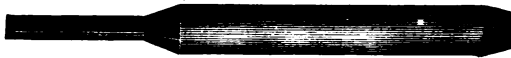
$\frac{1}{2}$ and $\frac{5}{8}$ inch, 24 cts. per pound. $\frac{3}{4}$ inch and larger, 16 cts. per pound.

Screw Anchor Shackles.



Sizes, $\frac{1}{2}$ $\frac{5}{8}$ $\frac{3}{4}$ $\frac{7}{8}$ 1 inch.
 Price, \$5.00 6.50 8.50 10.50 13.50 per dozen.

Chain Punches.



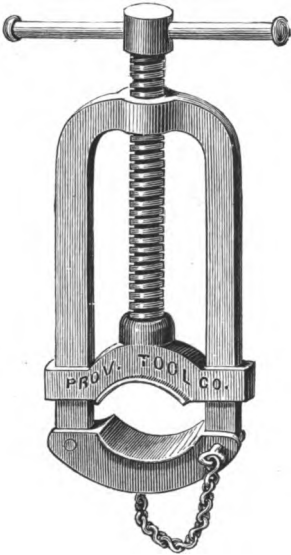
Price, \$3.60 per dozen.

Chain Hooks.



Price 18 cents per pound.

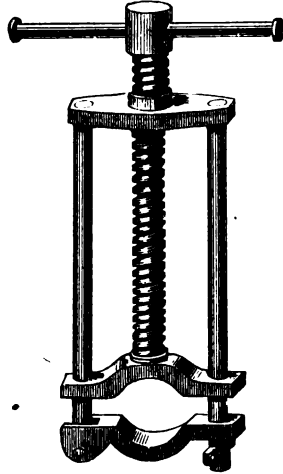
Rigger Screws.



Nos. 1 and 3.



No 4.



No. 2.

No. 1. Composition Heads.

Sizes,	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$ inch screws.
Price,	\$4.50	6.00	8.00	10.25	13.00	16.00 each.

No. 2. Wrought Iron.

Sizes,	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$ inch screws.
Price,	\$2.75	3.50	4.75	6.25	8.00 each.

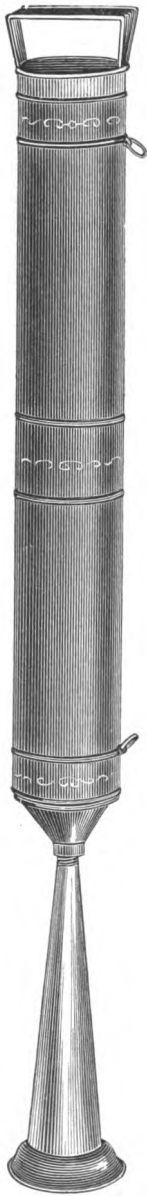
No. 3. Cast Iron Heads.

Sizes,	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{1}{2}$ inch screws.
Price,	\$2.50	2.75	3.75	4.50	8.50 each.

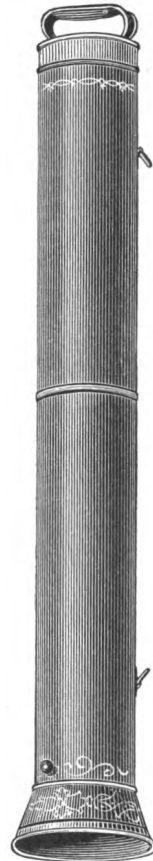
No. 4. Lobster Claw.

Sizes,	$\frac{7}{8}$	1	$1\frac{1}{8}$ inch screws.
Price,	\$3.00	3.25	3.50 each.

ANDERSON'S PATENT FOG ALARM.



Van Trump.



Anderson.

Price, \$8.00 each. One Size only.

To Owners and Masters of Sailing Vessels.

YOUR attention is invited to the fact that the **Anderson** and **Van Trump Fog Horns** are the *Standard Instruments* and the *only ones which answer the requirements of the Act of Congress of February 28, 1871*. Not only have both been approved and strongly recommended by the Board of Supervising Inspectors, but they have, after a long continued and most exacting test, in competition with other instruments, been certified by said Inspectors to be the *only* Fog Horns which make a sound equal to a steam whistle, the test required by the law.

The Secretary of the Treasury has approved of these instruments as answering the requirements of the law, and made them the Standard Fog Horns for use on all water craft other than steam vessels, as will be seen by his orders printed herewith.

For the information of those who are not familiar with the reasons which induced the Secretary to issue this second order, and who have supposed that this order revoked the whole or a part of the first, it may be well to state that it was sent out to correct a wrong impression, which quite extensively prevailed that the Treasury Department *compelled* all sailing vessels to carry the **Anderson** or **Van Trump Horn**; whereas the Secretary only intended to urge all parties to carry these Horns "in order to avoid confusion and *risk*," as by carrying these instruments which had been approved, they were sure to have a Horn which answered the requirements of the law.

As the Secretary did not intend "to declare the use of the designated instruments imperative," but only to designate, as was his duty under the law, standard instruments which might be carried by owners and masters of vessels, who preferred to comply with the provisions of the law rather than incur great risks and liabilities, his second circular did not revoke in any particular, but was only explanatory of the first. These Horns are the only ones which the Secretary of the Treasury has ever approved or adopted as the standard, and the only ones which have received the approval of the Inspectors as required by Section 11 of the Act above referred to.

Hence persons who use any other Horn are not only liable to the penalties provided by the 68th section, but in case of collision they cannot recover damages of the colliding vessel or boat, or recover their insurance if the insurance company refuse to pay.

These Horns are recommended by the Board of United States Supervising Inspectors, by the Treasury and Navy Departments of the United States, and have been purchased for use on the vessels of most of the foreign governments.

These Fog Horns are highly recommended by the Board of Underwriters of the leading cities in the Union, and are for sale by SHIP CHANDLERS in all the ports in the United States.

COPY OF LAW

COMPELLING VESSELS TO CARRY FOG-HORN.

An Act to provide for the Better Security of Life on Board of Vessels propelled in whole or in part by Steam, and for other purposes. Passed February 28, 1871.

Section 47 of said Act: "And be it further enacted, that upon each and every Vessel, Coal-Boat, Trading-Boat, Produce-Boat, Oyster-Boat, Fishing-Boat, Canal-Boat, Raft, or other water craft, navigating any Bay, Harbor, or River, by hand power, horse power, sail, or by the current of the river, or which shall be anchored or moored in or near the channel or fairway of any Bay, Harbor, or River, there shall be carried from sunset to sunrise, one or more good White Lights, which shall be placed in such manner as shall be prescribed by the Board of Supervising Inspectors: and every such vessel or raft, when running in fog, or thick weather, or shall be anchored or moored in or near the channel or fairway as aforesaid, and not in any port, shall sound a Fog-Horn at intervals of not more than two minutes."

Section 11 of said Act: "Provided, however, that no kind of instrument provided for by this Act shall be used on any such vessel which shall not first be approved by the Board of United States Inspectors."

Section 68 of said Act: "And be it further enacted, that the penalty for the violation of any provision of this Act, that is not otherwise specially provided for, shall be a fine of FIVE HUNDRED DOLLARS, *one half for the use of the informer.*"

CODE OF FOG-SIGNALS.

Sailing vessels, and every craft propelled by sails upon the ocean, lakes, and rivers, shall, when on their *starboard tack*, sound *one blast of their Fog-Horn*; when on their *port tack* they shall sound *two blasts* of their Fog-Horn; when with the wind, free or running large, they shall sound three blasts of their Fog-Horn; when lying to or *at anchor*, they shall sound a *general alarm*. In each instance, the above signals shall be sounded at intervals of not more than *two minutes*.

Sailing vessels, when not under way, and anchored or moored in the channel or fairway of commerce, shall sound the general alarm signal at intervals of not more than *two minutes*, and all *steamers* navigating in a fog or thick weather, shall, by the rules governing pilots, sound their *steam whistle* at intervals of not more than *one minute*.

It shall at all times be the duty of steamers to give to the sailing vessel, or other craft propelled by sails, every advantage, and keep out of her way.

(Copy of Circular issued by the Treasury Department.)

*Circular Designating what Fog-Horns shall be used upon
Sailing Craft.*

TREASURY DEPARTMENT, November 6, 1871.

To Collectors of Customs, Inspectors of Steam Vessels, and others :

Section 47 of the Act of Congress of February 28, 1871, relating to steam vessels, provides that each and every Coal-Boat, Trading-Boat, Produce-Boat, Canal-Boat, Oyster-Boat, Raft, or other water craft, navigating any bay, harbor, or river, by hand-power, horse-power, sail, or by the current of the river, when running in a fog, or thick weather, or shall be anchored or moored in or near the channel or fairway of any bay, harbor, or river, and not in any port, shall sound a fog-horn, or equivalent signal, at intervals of not more than two minutes, which shall make a sound equal to a steam whistle.

In order to avoid confusion and risk, and also to insure uniform sounds of fog-signals on all water craft, other than steam vessels, that may be distinguished from steam-whistles, the Department designates the "Anderson" and "Van Trump" Fog-Horns as the standard instruments for use on all water craft, except steam vessels, under the requirements of the section of the law above quoted — those instruments having received the approval of the Board of Supervising Inspectors of Steam Vessels, and also of this Department.

You will please be governed accordingly.

GEO. S. BOUTWELL,
Secretary of the Treasury.

1872. Department No. 24. Navigation Div. No. 8.

CIRCULAR IN RELATION TO FOG-HORNS.

TREASURY DEPARTMENT, March 28, 1872.

To Collectors of Customs, Inspectors of Steam Vessels, and others :

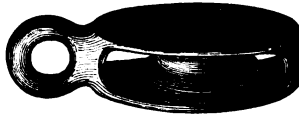
This Department, under date of November 6, 1871, issued a circular in pursuance of the provisions of Section 47 of the Act of Congress of February 28, 1871, relating to steam vessels, designating the Anderson and Van Trump Fog-Horns as standard instruments for use on all water craft other than steam vessels enumerated in the section mentioned.

Upon further consideration, it is the opinion of the Department that it is the intent of the Act to leave the selection of instruments to the masters or owners of sailing vessels, and to require only the use of an instrument producing A SOUND EQUIVALENT TO THAT OF A STEAM WHISTLE; and you will therefore consider the circular revoked, so far as it may have been understood to declare the use of the designated instruments imperative.

GEO. S. BOUTWELL,
Secretary of the Treasury.

Tackle Blocks.

GALVANIZED MALLEABLE IRON.



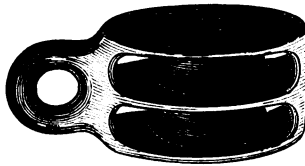
Single Sheaves, Single Buckets.

- | | | |
|--------|---------------------------------------|--------------------------|
| No. 1. | Diameter of rope, $\frac{1}{4}$ inch. | Price per dozen, \$1.00. |
| No. 2. | Diameter of rope, $\frac{1}{8}$ inch. | Price per dozen, 1.75. |
| No. 3. | Diameter of rope, $\frac{3}{8}$ inch. | Price per dozen, 2.75. |
| No. 4. | Diameter of rope, $\frac{1}{2}$ inch. | Price per dozen, 4.00. |



Single Sheaves, Double Buckets.

- | | | |
|--------|---------------------------------------|--------------------------|
| No. 6. | Diameter of rope, $\frac{1}{4}$ inch. | Price per dozen, \$1.00. |
| No. 7. | Diameter of rope, $\frac{1}{8}$ inch. | Price per dozen, 1.75. |
| No. 8. | Diameter of rope, $\frac{3}{8}$ inch. | Price per dozen, 2.75. |
| No. 9. | Diameter of rope, $\frac{1}{2}$ inch. | Price per dozen, 4.00. |

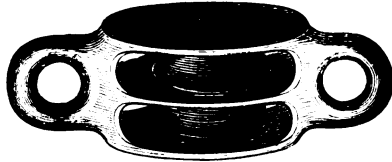


Double Sheaves, Single Buckets.

- | | | |
|---------|---------------------------------------|--------------------------|
| No. 11. | Diameter of rope, $\frac{1}{4}$ inch. | Price per dozen, \$1.50. |
| No. 12. | Diameter of rope, $\frac{1}{8}$ inch. | Price per dozen, 2.25. |
| No. 13. | Diameter of rope, $\frac{3}{8}$ inch. | Price per dozen, 3.50. |
| No. 14. | Diameter of rope, $\frac{1}{2}$ inch. | Price per dozen, 5.00. |

Tackle Blocks.

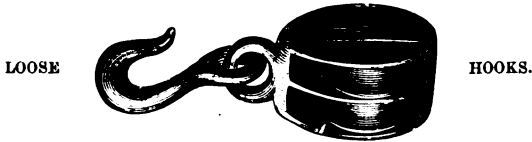
GALVANIZED MALLEABLE IRON.



Double Sheaves, Double Beckets.

- No. 16. Diameter of rope, $\frac{1}{4}$ inch. Price per dozen, \$1.75.
 No. 17. Diameter of rope, $\frac{1}{8}$ inch. Price per dozen, 2.50.
 No. 18. Diameter of rope, $\frac{3}{8}$ inch. Price per dozen, 4.00.
 No. 19. Diameter of rope, $\frac{1}{2}$ inch. Price per dozen, 5.50.

We also furnish blocks with beckets reversed, or with stationary hooks.



LOOSE

HOOKS.

Single Brass Sheaves.

- No. 20. Diameter of rope, $\frac{1}{2}$ inch. Price per dozen, \$7.80.
 No. 21. Diameter of rope, $\frac{5}{8}$ inch. Price per dozen, 12.00.
 No. 22. Diameter of rope, $\frac{3}{4}$ inch. Price per dozen, 18.00.

Double Brass Sheaves.

- No. 23. Diameter of rope, $\frac{1}{2}$ inch. Price per dozen, \$14.40.
 No. 24. Diameter of rope, $\frac{5}{8}$ inch. Price per dozen, 21.60.
 No. 25. Diameter of rope, $\frac{3}{4}$ inch. Price per dozen, 30.00.

Single Iron Sheaves.

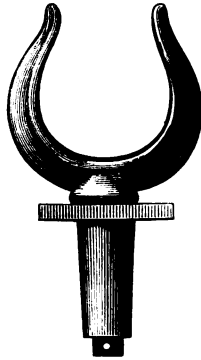
- No. 26. Diameter of rope, $\frac{1}{2}$ inch. Price per dozen, \$7.20.
 No. 27. Diameter of rope, $\frac{5}{8}$ inch. Price per dozen, 10.80.
 No. 28. Diameter of rope, $\frac{3}{4}$ inch. Price per dozen, 15.00.

Double Iron Sheaves.

- No. 29. Diameter of rope, $\frac{1}{2}$ inch. Price per dozen, \$12.00.
 No. 30. Diameter of rope, $\frac{5}{8}$ inch. Price per dozen, 18.00.
 No. 31. Diameter of rope, $\frac{3}{4}$ inch. Price per dozen, 24.00.

Hooks and Straps made of Wrought Iron and warranted. Larger sizes furnished to order.

Socket Rowlocks.



Galvanized Iron and Polished Brass.

Number,	1	2	3	4
Width of opening,	2	2½	2½	3 inches.
Galvanized,	70	90	\$1.20	1.40 per pair.
Polished brass,	\$2.15	2.65	3.15	4.25 per pair.

Extra Sockets.

Number,	1	2	3	4
Galvanized,	20	25	30	40 cents per pair.
Polished brass,	30	35	40	50 cents per pair.

GALVANIZED

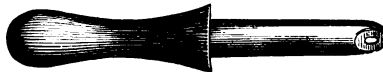
Whale Boat Rowlocks.

With Brass Sockets, 3 inch Oar, \$1.50 per pair.

Without Sockets, 3 inch Oar, 1.10 per pair.

Without Sockets, not galvanized, 1.00 per pair.

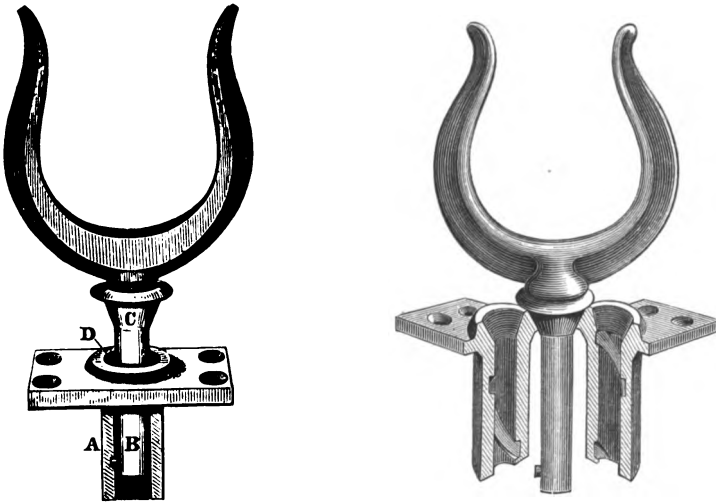
Thole Pin Rowlocks.



Galvanized Wrought Iron.

3 inch Shank 75 cents per pair.

BUSH'S Patent Self-Fastening Rowlock.

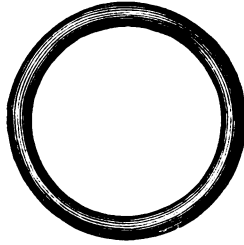


A is Brass Socket, the bore of which is rifled with a spiral groove, through which moves the pin attached to shaft B. Thus the pin follows the groove, making one revolution of the Rowlock to carry it through the socket. To remove it the pin must again enter the groove and receive a reversed revolution. C is a bevel, with flange, fitted to the corresponding bevel D. This novelty adds strength to the Rowlock, and at the same time makes it impossible for the shaft to wear loose.

It is easily adjusted and removed. It Fastens itself securely when placed in the Socket. It is so constructed that it cannot wear loose, the Socket being beveled to make a perfect fit.

Size.	Galvanized Iron, With Brass Socket. Price per Pair.	Polished Brass. Price per Pair.	Plain Brass. Price per pair.	Size Between Horns.
No. 1	\$1.50	\$4.00	\$2.75	2 inch.
No. 2	1.75	4.75	3.50	2½ inch.
No. 3	2.00	5.25	4.00	2½ inch.
No. 4	2.25	5.75	4.50	2¾ inch.

Mast Hoops or Rings.



Galvanized Wrought Iron.

Diam. Inside.	Price per Doz.	Diam. Inside.	Price per Doz.	Diam. Inside.	Price per Doz.
3	\$0.60	5½	\$1.20	8	\$1.65
3½	.70	6	1.30	8½	1.75
4	.85	6½	1.35	9	1.85
4½	1.00	7	1.40	9½	2.00
5	1.10	7½	1.50	10	2.20

Galvanized Iron Tacks.



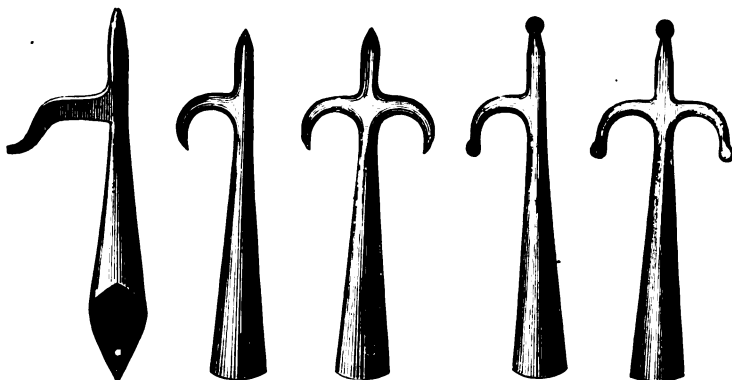
For Decks of Steamers, etc.

- 8 ounces, $\frac{1}{2}$ inch long, 28 cents per pound.
- 10 ounces, $\frac{9}{16}$ inch long, 27 cents per pound.
- 12 ounces, $\frac{5}{8}$ inch long, 26 cents per pound.
- 14 ounces, $\frac{11}{16}$ inch long, 25 cents per pound.
- 16 ounces, $\frac{3}{4}$ inch long, 24 cents per pound.
- 18 ounces, $\frac{13}{16}$ inch long, 24 cents per pound.

Packed in boxes of 25 pounds. Additional pound packages in paper, one cent advance per pound.

COPPER TACKS at market rates.

Boat Hooks.



Wrought Iron. Single, sharp. Double, sharp. Single navy. Double navy.

Wrought Iron.

POLISHED POINTS OR GALVANIZED, AS ORDERED.

- No. 1. Size of pole, $1\frac{1}{4}$ inch. Price, \$4.20 per dozen.
 No. 2. Size of pole, $1\frac{1}{2}$ inch. Price, 4.80 per dozen.
 No. 3. Size of pole, 2 inches. Price, 5.40 per dozen.

Single, Sharp Points.

MALLEABLE IRON, GALVANIZED.

- No. 4. Size of pole, $1\frac{1}{4}$ inch. Price, 30 cents each.
 No. 5. Size of pole, $1\frac{1}{2}$ inch. Price, 40 cents each.
 No. 6. Size of pole, 2 inches. Price, 45 cents each.

Double, Sharp Points.

- No. 7. Size of pole, $1\frac{1}{4}$ inch. Price, 40 cents each.
 No. 8. Size of pole, $1\frac{1}{2}$ inch. Price, 50 cents each.
 No. 9. Size of pole, 2 inches. Price, 75 cents each.

Single Navy, or Ball Points.

- No. 10. Size of pole, $1\frac{1}{4}$ inch. Price, 40 cents each.
 No. 11. Size of pole, $1\frac{1}{2}$ inch. Price, 45 cents each.
 No. 12. Size of pole, 2 inches. Price, 50 cents each.

Double Navy, or Ball Points.

- No. 13. Size of pole, $1\frac{1}{4}$ inch. Price, 60 cents each.
 No. 14. Size of pole, $1\frac{1}{2}$ inch. Price, 75 cents each.
 No. 15. Size of pole, 2 inches. Price, \$1.00 each.

Brass Boat Hooks furnished to order.

Boat Nails.



Warranted to Clinch. Blunt Point.

Lengths.	Price, Galvzd.	Price, Black.	Lengths.	Price, Galvzd.	Price, Black.
$\frac{3}{4}$	24	21	$2\frac{1}{2}$	21	18
1	23	20	$2\frac{3}{4}$	21	18
$1\frac{1}{8}$	23	20	3	21	18
$1\frac{1}{4}$	22	19	$3\frac{1}{4}$	20	17
$1\frac{1}{2}$	22	19	$3\frac{1}{2}$	20	17
$1\frac{3}{4}$	22	19	$3\frac{3}{4}$	20	17
2	21	18	4	20	17
$2\frac{1}{4}$	21	18			



Chisel Point.

Lengths.	Price, Galvzd.	Price, Black.	Lengths.	Price, Galvzd.	Price, Black.
$\frac{3}{4}$	26	23	$2\frac{1}{2}$	22	19
1	25	22	$2\frac{3}{4}$	22	19
$1\frac{1}{8}$	25	22	3	22	19
$1\frac{1}{4}$	24	21	$3\frac{1}{4}$	21	18
$1\frac{1}{2}$	23	20	$3\frac{1}{2}$	21	18
$1\frac{3}{4}$	23	20	$3\frac{3}{4}$	20	17
2	22	19	4	20	17
$2\frac{1}{4}$	22	19			

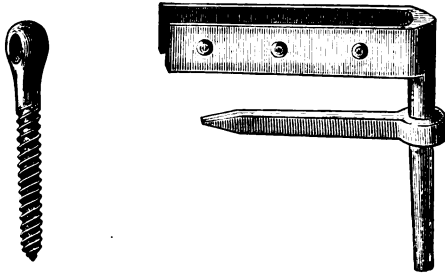


Countersunk Head.

Lengths.	Price, Galvzd.	Price, Black.	Lengths.	Price, Galvzd.	Price, Black.
$\frac{3}{4}$	26	23	$2\frac{1}{2}$	22	19
1	25	22	$2\frac{3}{4}$	22	19
$1\frac{1}{8}$	25	22	3	22	19
$1\frac{1}{4}$	24	21	$3\frac{1}{4}$	21	18
$1\frac{1}{2}$	23	20	$3\frac{1}{2}$	21	18
$1\frac{3}{4}$	23	20	$3\frac{3}{4}$	20	17
2	22	19	4	20	17
$2\frac{1}{4}$	22	19			

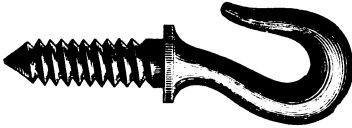
Packed in boxes of 25 or 50 pounds, and kegs of 100 pounds.
Galvanized, Sheathing, and common cut Nails furnished to order.

Galvanized Rudder Braces.

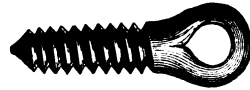


Numbers,	1	2	3
Width between straps,	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$ inch.
Price per dozen sets,	\$3.25	3.80	4.50.

Deck Hooks and Rudder Gudgeons.



Deck Hooks.



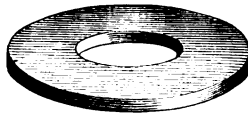
Rudder Gudgeons.

Wrought Iron and well Galvanized.

Galvanized Iron Deck Hooks, stem $1\frac{3}{4}$ inches long, with thread.
Price, \$3.00 per dozen.

Galvanized Iron Rudder Gudgeons, stems $2\frac{1}{2}$ inches long, with thread.
Price, \$2.25 per dozen.

Galvanized Iron Washers.



Size of hole,	$\frac{1}{8}$	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$ inch.
Price per pound,	42	36	36	33	30	23	23	23	23 cents.

Ship and Boat Spikes.



Prices given on application.

Galvanized Ring Bolts.



With or without Thread.

Size,	$\frac{3}{8}$	$\frac{7}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1 in. iron.
Galvanized,	34	30	25	22	20	20	20 cts. per lb.
Black,	31	27	22	19	17	17	17 cts. per lb.
Cutting Thread,	25	30	35	40	50	75	80 per doz. extra.

Any required sizes made to order, either Rings or Bolts. Black do. 4 cts. per lb. less.

Galvanized Belaying Pins.



No.	1	2	3
Whole length,	15	17	18 inches.
Diameter,	1	$1\frac{1}{8}$	$1\frac{1}{2}$ inches.
Length Shank,	$8\frac{1}{2}$	$9\frac{1}{2}$	10 inches.
Price,	50	75	90 cts. each.

Galvanized Iron Cleats.



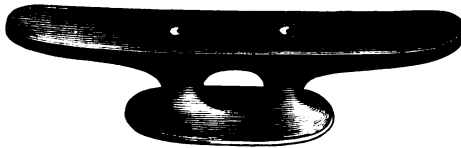
Numbers,	1	2	3	4	5	6
Length,	2	$3\frac{1}{4}$	$3\frac{3}{4}$	$4\frac{1}{2}$	$5\frac{3}{4}$	$6\frac{1}{2}$ inches.
Price,	65	\$1.00	1.50	1.65	1.85	2.50 per dozen.

Galvanized Awning Cleats.



Numbers	11	12	13
Length,	$4\frac{1}{2}$	6	8 inch.
Price,	40	60	75 cents per dozen.

Cast Iron Cleats.



Sizes, 5, 7, $8\frac{1}{2}$ inches. Price 11 cts. per pound.

Galvanized, 15 cts. per pound.

Sizes, $10\frac{1}{2}$, 13, 15, 18, 24, 28, 32, 36, 40 inches.

Price, 8 cts. per pound. Galvanized, 12 cts. per pound.

Cast Iron Chocks.



Sizes, $7\frac{1}{4}$ $8\frac{1}{2}$ inches. Price, 11 cts. per pound.

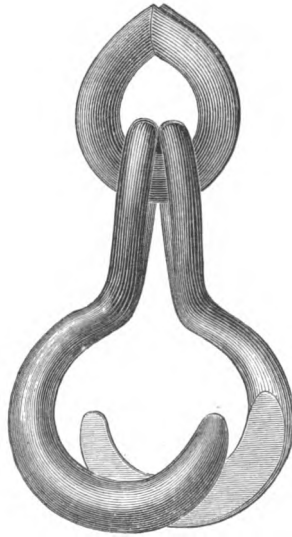
Galvanized, 15 cts. per pound.

Sizes, $10\frac{1}{2}$, $11\frac{1}{2}$, 13, 14, 15 inches. Price, 8 cts. per pound.

Galvanized, 13 cts. per pound.

Sailmakers' Sister Hooks.

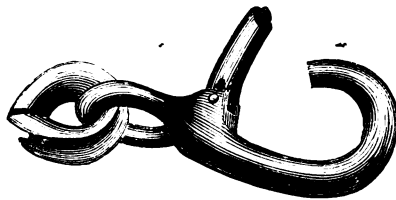
Galvanized.



Diameter under eye $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$. Price, 23 cents per pound.

Self-Mousing Gaff-topsail Hooks.

Galvanized.



Henshaw's Patent.

Sizes, $\frac{7}{16}$ $\frac{1}{2}$ $\frac{5}{8}$ $\frac{3}{4}$ $\frac{7}{8}$ inch.

Price, 30 45 95 \$1.10 1.25 each.

$\frac{3}{4}$ and $\frac{7}{8}$ Wrought Iron, and the $\frac{7}{16}$ and $\frac{1}{2}$ inch Malleable Iron.

Gaff-topsail Hooks.

Galvanized.

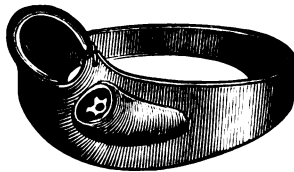


W. Coleman & Son's Patent.

Sizes. Inch.	Score of Thimble. Inch.	Price Each.	Tested to Pounds.	Breaking Strain. Pounds.
$\frac{1}{4}$	$\frac{3}{8}$	\$0.20	1,300	2,597
$\frac{1}{2}$	$\frac{1}{2}$	.25	1,300	2,551
$\frac{3}{8}$	$\frac{5}{8}$	.30	1,700	3,592
$\frac{7}{16}$	$\frac{7}{8}$	.40	1,900	3,781
$\frac{1}{2}$	$\frac{7}{8}$	.50	2,100	5,769
$\frac{9}{16}$	1	.55	2,100	5,455
$\frac{5}{8}$	$\frac{7}{8}$	.75	—	—
$1\frac{1}{8}$	1	.95	—	—
$\frac{3}{4}$	$1\frac{1}{8}$	1.15	—	—
$\frac{7}{8}$	$1\frac{1}{4}$	1.40	—	—

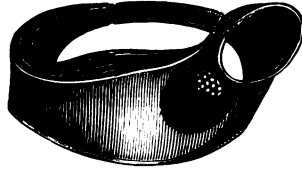
The last four series being Wrought Iron, are not tested.

Sailors' Palms.



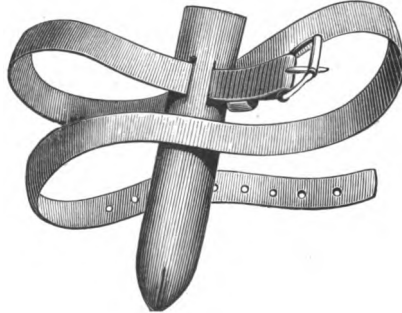
Common Hide, no brass,	\$1.87 per dozen.
Hide and brass,	2.50 per dozen.
Regular Hide, no brass,	2.25 per dozen.
Brass, no hide,	2.25 per dozen.
Extra long hide,	5.00 per dozen.

Sail-Makers' Extra Palms.



Seaming	\$2.00 each.
Roping	2.50 each.
Mullen's Seaming	3.00 each.
Mullen's Roping	3.50 each.

Sheaths and Belts.



Common, \$2.75 per dozen. Regular, \$3.50 per dozen.


LOLLEYS

Short Square Sail Needles.



No. 17.	Flat seam	\$1.35 per hundred.
No. 16.	Tabline	1.35 per hundred.
No. 15.	Old work	1.45 per hundred.
No. 14.	Store	1.60 per hundred.
No. 13.	Head-rope	2.10 per hundred.
No. 12.	Small bolt-rope	2.75 per hundred.
No. 11.	Middle bolt-rope	3.30 per hundred.
No. 10.	Large bolt-rope	3.75 per hundred.
No. 9.	Small marline	5.00 per hundred.
No. 8.	Large marline	6.00 per hundred.


. JAMES SMITH & SON'S
Long Square Sail Needles.



No. 17	\$1.30 per hundred.
No. 17½	1.30 per hundred.
No. 16	1.30 per hundred.
No. 16½	1.30 per hundred.
No. 15	1.30 per hundred.
No. 15½	1.30 per hundred.
No. 14	1.50 per hundred.
No. 14½	1.75 per hundred.
No. 13	2.75 per hundred.
No. 12	3.60 per hundred.
No. 11	5.50 per hundred.
No. 10	6.50 per hundred.
No. 9	7.50 per hundred.
No. 8	8.50 per hundred.

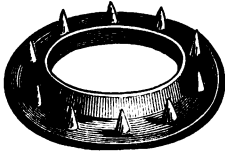
When ordering, state whether Long or Short Square.

SMITH & SON'S
Packing or Sack Needles.

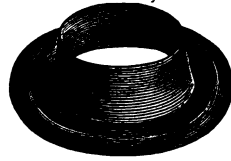


No. 14	\$2.00 per hundred.
No. 13	2.00 per hundred.
No. 12	2.25 per hundred.
No. 11	2.67 per hundred.
No. 10	3.00 per hundred.
No. 9	4.00 per hundred.
No. 8	4.33 per hundred.
No. 7	5.33 per hundred.
No. 6	8.00 per hundred.

Grommets.



Cast Brass.



Sheet Brass.

Patent Conical Pointed, Rolled Rim, of Sheet, and Cast Brass.

Numbers,	2	3	4	5	6	7	8
Diam. of hole as inserted,	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{8}$ in.
Price per gross,	\$2.25	3.00	4.00	5.25	6.12	8.50	9.00

No. 7 and 8 correspond in size with No. 8 and 9 of the Wilcox Patent.

The Conical Points keep the canvas in place while setting, and cannot be pulled out when inserted, making the most durable Grommet in use.

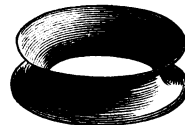
Wilcox Patent Galvanized Iron Grommets.

Numbers,	1	2	3	4	5	6	7	8	9
Per gross,	\$2.00	2.25	3.00	4.00	5.25	6.12	7.75	8.50	9.00

Eyelet Grommets.



Before being inserted.

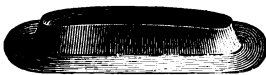


After being inserted.

Sheet Brass.

Numbers,	1	2	3	4	5	6	7	8	9	10
Diam. of hole,	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$
Price per gross,	\$1.25	1.50	1.75	2.00	2.50	3.00	3.50	5.50	6.50	7.50

Oblong Mail-Bag Grommets.



Price, \$6.50 per gross.

Sheet Brass Grommets.



With Teeth.

Numbers,	0	1	2	3	4	5
Diam. of hole as inserted,	$\frac{7}{32}$	$\frac{1}{8}$	$\frac{3}{8}$	$\frac{7}{8}$	$\frac{1}{2}$	$\frac{5}{8}$ inch.
Price per gross,	80	\$2.00	2.25	3.00	3.25	4.00



With Washers.

Numbers,	0	1	2	3	4	5
Diam. of hole as inserted,	$\frac{7}{32}$	$\frac{1}{8}$	$\frac{3}{8}$	$\frac{7}{8}$	$\frac{1}{2}$	$\frac{5}{8}$ inch.
Price per gross,	80	\$2.00	2.25	3.00	3.25	4.00

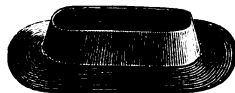
Have discontinued making Nos. 6 and 7.

PATENT OBLONG

Conical Pointed Navy Grommets.



Cast Brass.



Sheet Brass.

Price, \$7.00 per gross.

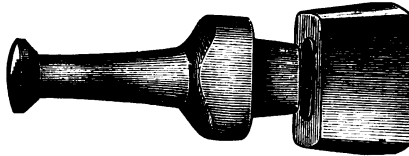
Setting Dies

**For Inserting Patent Rolled Rim, Conical Pointed,
Sheet Brass, and Eyelet Grommets.**



Nos.	0	1	2	3	4	5	6	7	8	9	10
Price,	\$2.25	2.40	2.50	2.60	2.80	3.00	3.10	3.25	3.50	3.75	4.75

Setting Dies for Oblong Grommets.



Price, \$10.00 per set.

Steel Cutting Punches.



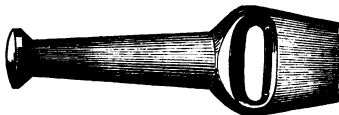
Nos.	0	1	2	3	4	5	6	7	8	9	10
Price,	\$1.00	1.10	1.20	1.30	1.50	1.75	2.00	2.25	2.50	2.75	3.00

Side Cutting Punches.

Nos.	0	1	2	3	4	5	6	7	8	9	10
Price,	50	50	50	65	75	80	\$1.00	1.50	1.75	2.25	2.50

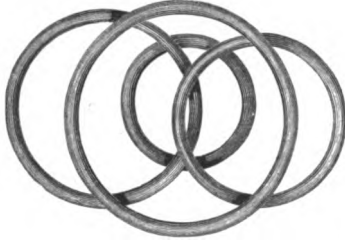
CUTTING

Punches for Oblong Grommets.



Price, \$2.00 each.

Galvanized Grommet Rings.



Inside Diameter.	Light, per Gross.	Heavy, per Gross.
$\frac{3}{8}$ inch	\$0.40	\$0.50
$\frac{1}{2}$ inch	.45	.60
$\frac{5}{8}$ inch	.50	.80
$1\frac{1}{8}$ inch	.60	.90
$\frac{3}{4}$ inch	.70	1.00
$1\frac{1}{8}$ inch	.80	1.25
$\frac{7}{8}$ inch	.96	1.35
$1\frac{1}{8}$ inch	1.05	1.50
1 inch	1.25	1.75
$1\frac{1}{8}$ inch	1.45	2.25
$1\frac{1}{4}$ inch	1.75	2.75
$1\frac{1}{2}$ inch	2.25	3.50
$1\frac{3}{4}$ inch	3.25	4.50
$2\frac{1}{4}$ inch	4.25	6.00
2 inches	5.25	8.00
$2\frac{1}{2}$ inches	—	9.50
$2\frac{3}{4}$ inches	—	10.25
$2\frac{7}{8}$ inches	—	13.00
3 inches	—	14.50

Used by Sail-makers in place of the Line or Rope Grommet.

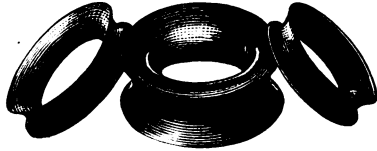
Always measure the hole in the clear when ordering.

(Packed in 1 gross boxes, except $1\frac{3}{4}$, 2, and $2\frac{1}{4}$ inch in one half gross boxes, $2\frac{3}{8}$, $2\frac{3}{4}$, and 3 inch put up in one quarter gross boxes.)

Steel Grommet Chisels.

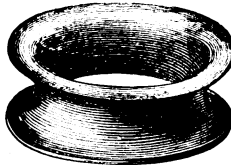
Price, 40 cents each.

Galvanized Iron Thimbles.



Outside Diameter. Inches.	Light, Per dozen.	Heavy, Per dozen.	(Navy Pattern.) Extra Heavy, Per dozen.	Lip or Saddle, Per dozen.
$\frac{3}{4}$	\$0.25	—	—	—
1	.35	—	—	—
$1\frac{1}{8}$	.38	—	—	—
$1\frac{1}{4}$	.40	—	—	—
$1\frac{3}{8}$	.45	—	—	—
$1\frac{1}{2}$	.50	—	—	—
$1\frac{3}{4}$	.55	—	—	—
2	.65	\$0.80	\$1.25	—
$2\frac{1}{4}$	.75	.95	1.50	\$1.50
$2\frac{1}{2}$	.90	1.40	2.00	1.75
$2\frac{3}{4}$	1.05	1.75	2.25	2.00
3	1.20	1.90	2.60	2.50
$3\frac{1}{4}$	1.50	2.12	3.00	3.00
$3\frac{1}{2}$	1.85	2.40	3.25	3.50
$3\frac{3}{4}$	2.12	3.10	4.00	—
4	—	3.60	4.50	4.00
$4\frac{1}{4}$	—	4.00	5.00	—
$4\frac{1}{2}$	—	4.75	6.25	—
$4\frac{3}{4}$	—	6.00	6.75	—
5	—	7.00	7.25	—

Brass Thimbles.



Sizes,	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2 inches.
Price,	65	70	75	\$1.00	1.25	1.50 per dozen.

$2\frac{1}{4}$ to 5 inches inclusive, 70 cts. per pound.

Standing Fids.



Best seasoned Hickory.

Numbers,	1	2	3	4
Size of butt,	4	5	6	6½
Length,	30	32	36	40
Price,	\$1.50	2.00	2.50	3.00

Hand Fids.



Numbers,	1	2	3	4
Sizes,	14	16	18½	20½ inches long.
Price,	25	30	35	40 cents each.

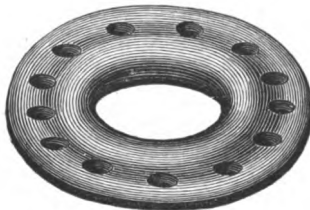
Made of the best seasoned walnut, and turned hollowing.

Sail Prickers.



Best cast steel, round points. Price, \$4.50 per dozen.

Improved Iron Buntline Leader.



Galvanized, \$2.00 per dozen.

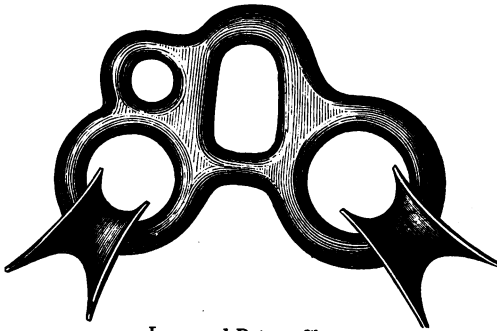
Galvanized Wrought Iron Clews.



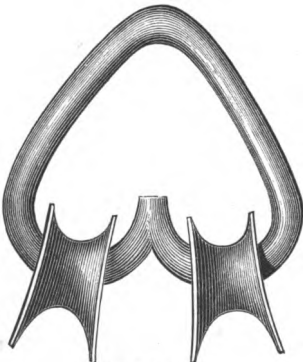
Ship Clews with Bar.



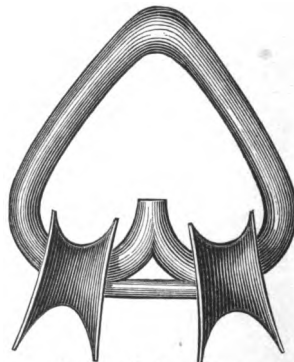
Clews with Bow.



Improved Patent Clew.



Heart Clew.



Improved Heart Clew.

Galvanized Wrought Iron Clews.



Spectacle Clew.



Ship's Course Clew.



Ring Clew.

Sizes, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$ inch.

Price, Black, 17 cts. per pound.

Galvanized, 20 cts. per pound.

Bench Sail Hooks.



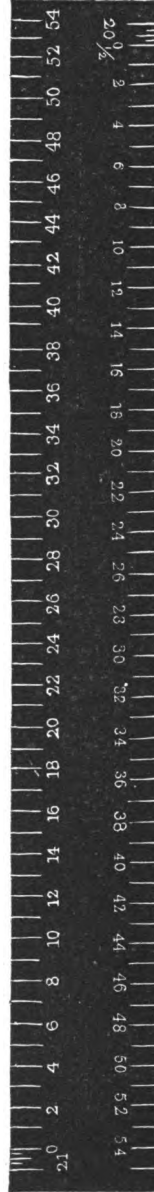
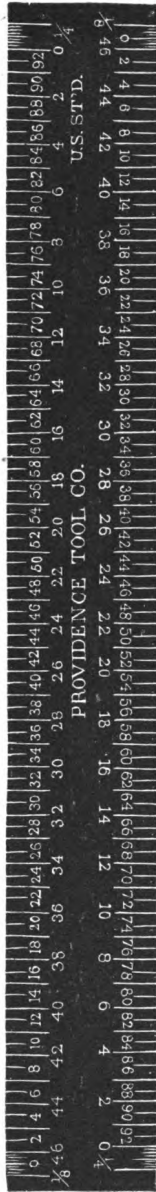
Small plain \$1.00 per dozen.

Large plain 1.25 per dozen.

Brass swivel 1.50 per dozen.

Sail-maker's Drafting Scale.

MADE OF NICKEL SILVER. BEVELED EDGES. PRICE, \$5.00.



The standard of this Scale has been approved and adopted by many of the leading Sail-makers in the country,
as the simplest and best.

Steel Taper Rule.

FOR MEASURING HOLES IN NUTS, WASHERS, ETC.

PRICE, \$10.00.



The Figures upon the edges are for 16ths and 32ds, and 10ths and 20ths of an inch between spaces.

Also U. S. Standard sizes of Holes to Tap for Bolts.

INDEX.

	PAGE
Anchors	67
Belaying Pins, Galvanized	92
Blanks for Door Spring Nuts	14
Boat Nails	90
Bolster Plate, Patent Wrought Iron	53
Bolt Ends	24
Bolts, Bridge and Roof	23, 59
Bolts, Carriage	31
Bolts, Hanger	23
Bolts, King	59
Bolts, Machine	20
Bolts, Plow	21
Bolts, Skein	59
Bolts, Stove	32
Bolts, Tap	25
Bolts, Tire	32
Buntline Leader, Improved Iron	103
Burrs, Au Sable, or Norway Iron	17
Calking Irons	71
Calker's Tools	70
Can Rings, Tinned	40, 41
Chain Links	18
Chain Punches	78
Chocks, Cast Iron	93
Clamps, Screw	67
Claw and Pinch Bars	33
Clearer Springs	38
Cleats, Awning, Galvanized	93
Cleats, Cast Iron	93
Cleats, Iron, Galvanized	93
Clews, Galvanized Wrought Iron	104, 105
Clinch Rings	37
Cold Chisels	35
Connecting Shackle, Improved Wrought Iron	73
Connecting Shackle, Thompson's Patent	73
Coupling Plate, Wrought Iron	57

Crow Bars	33
Deck Hooks, and Rudder Gudgeons	91
Double-Tree Plate, Wrought Iron	57
Drafting Scale, Sailmakers'	106
Ferrules, Galvanized Iron	43
Fids, Hand	103
Fids, Standing	103
Fog Alarm, Anderson's Patent	80-83
Fog Horns, Tin	65
Grains, Five Prong	68
Grommet Chisels, Steel	101
Grommet Rings, Galvanized	101
Grommets, Eyelet	98
Grommets, Oblong Mail-bag	98
Grommets, Patent Oblong, Conical Pointed Navy	99
Grommets, Patent Conical Pointed, Rolled Rim, Brass	89
Grommets, Sheet Brass	99
Grommets, Wilcox Patent Galvanized	98
Hammer Strap, Patent	58
Hanks, Galvanized Wrought Iron	66
Harpoons	69
Harrow Teeth	59
Harrow Teeth, Patent Headed	59
Hawsing Irons	71
Hawsing Mallets	72
Hinge Nails	35
Hinge and Wagon Nails	56
Hinges, Chest, Finished	64
Hinges, Flap, Common	61
Hinges, Flap, Heavy Brass	61
Hinges, Gangway	64, 65
Hinges, Hasp, Composition or Brass	60
Hinges, Plate	34
Hinges, Port, Composition or Brass	63
Hinges, Screw Hook and Eye	35
Hinges, Screw Hook and Strap	34
Hinges, Heavy Skylight	62
Hinges, Strap, Finished	64
Hinges, Strap, Common	61
Hinges, Strap and "T"	36
Hinges, Small Water Port	62
Hitching Ring, Screw	58
Hooks, Barrel or Can	65
Hooks, Bench Sail	105

Hooks, Boat	89
Hooks, Box	42
Hooks, Chain	78
Hooks, Cotton	42
Hooks, Deck	91
Hooks, Gaff-topsail	95
Hooks, Hay	42
Hooks, Match, or Sister	74, 94
Hooks, Ring Match	75
Hooks, Self-mousing Gaff-topsail	94
Hooks, Small Eyed Block	76
Hooks, Swivel	75
 Lathe Dogs	 30
Levers	39
Lily and Toggle Irons	69
 Mallets, Calking	 70
Mallets, Hawsing	72
Mallets, Walnut	68
Marline Spikes	72
Mast Hoops or Rings	88
Match or Sister Hooks and Thimbles	74
Mauls, Railroad Spike	40
Mauls, Top	40
Moulton Roll	51, 52
 Neck Yoke Eye and Ring	 58
Neck Yoke Plates, Wrought Iron	57
Needles, Packing or Sack	97
Needles, Sail, James Smith and Son's Long Square	97
Needles, Sail, Lolley's Short Square	96
Nuts, Average Number in a Keg	16
Nuts, Door Spring, Blanks for	14
Nuts, Hexagon	7, 9
Nuts, Light or "P" Sizes	10
Nuts, Machinery	11-13
Nuts, Ratchet	14
Nuts, Star	14
Nuts, Square	6, 8
Nuts, U. S. Government Standard Sizes	10
 Packing, or Sack Needles, Smith and Son's	 97
Palms, Sailmakers' Extra	96
Palms, Sailors'	95
Picks, American Iron	33
Picks, Norway Iron	33
Providence Wringer	46-52

Punches, Cutting, for Oblong Grommets	100
Punches, Side Cutting	100
Punches, Steel Cutting	100
Rigger Screws	79
Ring Bolts, Galvanized	92
Rowlock, Bush's Patent Self-fastening	87
Rowlocks, Socket	86
Rowlocks, Thole Pin	86
Rowlocks, Whale Boat	86
Rub Iron, Patent Wrought	56
Rudder Braces	91
Rudder Gudgeons	91
Sail Prickers	103
Screws, Cap	26, 27
Screw, Coach, in Kegs	22
Screws, Gimlet-point Coach	22
Screws, Hexagon Head Cap	27
Screws, Lag	21
Screws, Machine	28
Screws, Rigger	79
Screws, Round Head Set or Cap	27
Screws, Set	25, 26
Screws, Square Head Cap	26
Screws, Square Head Set	26
Screws, Wm. H. Haskell & Co.'s List of Threads	22
Set Screws and Tap Bolts	25
Setting Dies for Inserting Grommets	100
Setting Dies for Oblong Grommets	100
Shackles, Anchor and Chain	78
Shackles, Screw Anchor	78
Shackles, Ankle and Wrist	68
Shackles, Connecting	73
Sheaths and Belts	96
Sheaves, Galvanized Iron	72
Ship and Boat Spikes	92
Ship and Boat Spikes, Composition	63
Ship Scrapers	69
Sister Hooks, Sailmakers'	94
Sister Hooks and Thimbles	74
Staples, Wrought Iron	43
Stirrups	38
Table showing the average number of Nuts in a Keg	16
Table showing the average number of Washers in a Keg	17
Tackle Blocks	84, 85
Tackle Hooks and Thimbles	74

Tacks, Galvanized Iron	88
Taper Rule, Steel	107
Taps, Hand	29
Taps, Machine	29
Thimbles, Brass	102
Thimbles, Galvanized Iron	102
Thimbles, Open	77
Thimbles, Heavy Wrought Iron, Welded	77
Thimbles, Wire Rope	76
Threshing Machine Teeth	19
Thumb Screws, Finished	30
Toggle Irons	69
Tongue Plate, Wrought Iron	57
Top Card Plates	39
Turn Buckles	24
Wagon Box, or End Gate Rod	58
Wagon Box Staples	56
Wagon Box Strap Bolt, Patent	54
Wagon Brake Ratchet, Patent	53
Wagon Hardware	53, 55
Wagon Nails	56
Wagon Rivet, Extra Large	54
Wagon Steeple Head Rivet	54
Washers, Cast Iron	59
Washers	15
Washers, Average Number in a Keg	17
Washers, Iron, Galvanized	91
Wedges, Iron	59
Weight of Flat Rolled Iron	45
Weight of Round Rolled Iron	44
Weight of Square Iron	44



